

NAVAL AVIATION NEWS



August 1978





COVERS — Front, T-34C Mentor, NAS Whiting Field in the background, was photographed by PH3 Robert Williamson. (Whiting features begin on page 8.) LCdr. Peter Mersky was outside pri-fly aboard USS Kennedy during 1978 operations when he filmed the HH-46A Sea Knight from HC-16. Here, PH2 S. W. Smith captured HT-18 Huey in USS Lexington carqual pattern.

NAVAL AVIATION NEWS

SIXTIETH YEAR OF PUBLICATION

Vice Admiral Frederick C. Turner
Deputy Chief of Naval Operations (Air Warfare)
Vice Admiral F. S. Petersen
Commander, Naval Air Systems Command

THE STAFF

Captain Ted Wilbur	Head, Aviation Periodicals and History
Cdr. Rosario Rausa	Editor
Dorothy L. Bennefeld	Managing Editor
Charles C. Cooney	Art Director
JOCS Bill Bearden Helen F. Collins	Associate Editors
Sandy Nye	Assistant Editor
Cdr. Bob Cole	Contributing Editor
Harold Andrews	Technical Advisor

editor's corner



Kiwis Can Fly. Sergeant K. Rounthwaite of the Royal New Zealand Air Force sent this photograph of an A-4K Skyhawk. "The roundel," he wrote, "was introduced in 1970 featuring the New Zealand kiwi - ironically a flightless bird. It is placed on our aircraft so that the kiwi always faces into the wind."

The View from a Man in Blue. Captain James J. Lawrence, USAF, visited USS Coral Sea and wrote an account which appeared in *Aerospace Safety*, February 1978. The following are excerpts: "Take your typical Air Force base directory and jam all the services listed into a 1,000-foot by 400-foot hangar. That's your typical aircraft carrier." Commenting on his quarters, the captain said, "... stateroom is a bit of a

misnomer. The room was 8' by 12' with two bunks, dressers and a small closet area. My initial reaction was that if I encountered such quarters at an Air Force base, I would immediately declare them unfit and pull my crew to a downtown motel. I shortly realized, however, that I had been spoiled for my quarters were of the best available, especially for single occupancy." "The enlisted personnel," he observed, "live in areas reminiscent of old war movies. Eight or more men are often jammed into an area no bigger than most AF johns . . . Such conditions, encountered during cruises which could last six months or more, make Air Force life seem rather pleasant by comparison . . . most people average 16 hours of duty daily."

"Despite conditions which appear

sub-par by our normal working standards, I found the people to be highly motivated and for the most part proud of their ship and duty. This can only be attributed to the maintenance of a delicate line between discipline and motivation, though the typical Air Force person would feel the discipline much more severe than he normally encounters."

Even if these are one man's personal observations, they constitute a very nice salute to the carrier and its crew.

Animal Corner. These MCAS El Toro Marine runners met with Girard the Giraffe last June while practicing for the Leatherneck Marathon. One Ma-



rine gets a foot massage from his African friend. The Lion Country Safari landmark was just one of many along the 26-mile route.



Naval Aviation Ball. The plaque was headlined "Navy's Flight Leader" and Chief of Naval Operations Admiral James L. Holloway III proudly accepted it. Mrs. Holloway looked on as Vice Admiral Frederick C. Turner, Deputy Chief of Naval Operations (Air Warfare), made the presentation at the annual Naval Aviation Ball for Wash-

ington area flyers and supporters held at the Fort Myer Officer's Club on May 26.

Admiral F. H. Michaelis, Chief of Naval Material, was also honored for his many years of service in Naval Aviation. More than 280 attended the affair. Adm. Holloway retired on July 1; Adm. Michaelis on August 1.

Shorting the Marines. Naval Aviation friend Max Schwarz sent us the following from the August 1933 issue of *The Navy Record*: "The Civilian Conservation Corps was supposed to chop underbrush in the forests but they also chopped one inch off the minimum height requirements of the United States Marine Corps. This was revealed by Major A. B. Miller, USMC, when he announced that, for the remainder of July, the minimum height requirement for enlistment in the Marines was 5 feet 7 inches instead of 5 feet 8 inches. 'The reduction is an emergency measure,' Miller explained. 'The CCC took 250,000 men between the ages of 18 and 30 and in them were our five-foot eight-inches.'"

did you know?

New CNO

In a change-of-command ceremony at the Naval Academy, Annapolis, Md., on July 1, Admiral Thomas B. Hayward relieved Admiral James Holloway III as Chief of Naval Operations. Adm. Hayward's last duty was as Commander in Chief, Pacific Fleet. Adm. Holloway retired on the same day.

Camera Pod

An LB-31A camera pod was used to take this photo of a VA-25 *Corsair* piloted by Lt. Flip Wilson. While deployed to NAS Fallon, Nev., with CVW-2 for weapons training, the squadron evaluated the camera pod. Mounted on a



wing-station parent rack with a modified cable, the device is activated when the bomb release is depressed, allowing the pilot to concentrate on weapons delivery. The camera produces good quality strike photos. The pod features easy access to both film and camera, reducing maintenance problems.

Gray Eagle

Lieutenant General Thomas H. Miller, Deputy Chief of Staff for Aviation, Headquarters, Marine Corps, became the new Gray Eagle on June 30 at MCAS Kaneohe Bay, Hawaii. The award, which honors the Naval Aviator on active duty who has the most longevity as a pilot, was presented by Mr. Robert Kirk, President of Vought Corporation, which sponsors the Gray Eagle Trophy.

Until May 31, 1978, CWO4 Henry Wildfang, USMC, of Marine Aerial Refueler/Transport Squadron 252 at Cherry Point was the Gray Eagle (*NAVNews*, October 1977, p. 5). He retired and Major General Frank C. Lang, USMC, Deputy Commander, Fleet Marine Force, Pacific, held the honor. It was during Maj. Gen. Lang's retirement ceremonies that the award was again transferred — this time to Lt. Gen. Miller.

Lt. Gen. Miller's many accomplishments include being the first American to fly the AV-8 *Harrier* and setting a 500-kilometer closed course world speed record at a speed of 1,216.78 miles per hour in an F-4B at Edwards AFB, Calif., on September 5, 1960.

Saratoga SLEP

When *Saratoga's* modernization begins in late 1980, it will inaugurate the service life extension program (SLEP) for *Forrestal*-class carriers built in the mid and late 1950s. This will extend the life span of these ships into the late 1990s.

Saratoga will enter the naval shipyard in Philadelphia for approximately 2½

did you know?

years of extensive repair, overhaul and renovation of her hull and mechanical and electrical systems. The projected cost is \$496 million. The work will increase the number of employees at the shipyard from about 6,970 to 9,650.

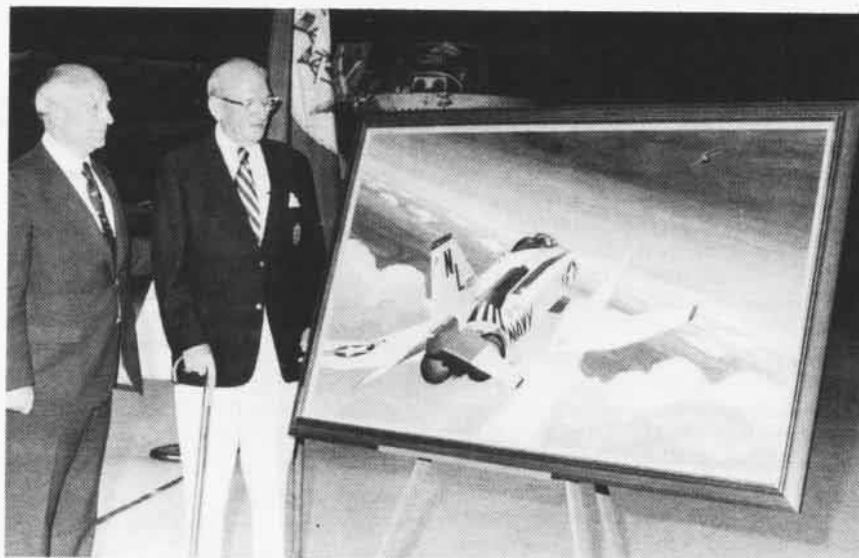
Navy League Awards

Cdr. E. Erle Rogers II, skipper of HM-12, is the winner of the 1977 Stephen Decatur Award for Operational Excellence. The award is presented by the Navy League to an individual from the Navy or Marine Corps for outstanding personal contributions to the readiness and competence of the naval service in actual operations. During 1977 Cdr. Rogers served first as X.O. and then as C.O. of HM-12, Navy's only airborne mine countermeasures squadron at the time. The squadron maintains two fully deployable detachments in case of a national emergency.



1,000 Traps

Did you know that this plaque, hanging in the Naval Aviation Museum in Pensacola lists Naval Aviators with 1,000 traps to their credit? The plaque will be updated from time to time.



Naval Aviation Museum

Admiral Thomas H. Moorer, USN(Ret.), left, former Chairman of the Joint Chiefs of Staff, and Edward Hebert, retired Chairman of the House Armed Services Committee, view an oil painting of an F-4 shooting down a Russian MiG. They presented the painting to the Naval Aviation Museum to kick off a recent fund-raising drive.

Funds received will be used to add two new wings to the present 68,000-square-foot museum, allowing for additional aviation exhibits and a memorabilia room which will depict the early growth of Pensacola which has long been recognized as the birthplace of Naval Aviation.

National Helicopter Association Awards

Captain W. O. Wirt, Jr. is the first active duty military man to win the National Helicopter Association's Bendix Trophy. He is the rotary wing aircraft test director at the Naval Air Test Center, Patuxent River, and one of the early helo pilots who switched from fixed-wing fighters to helos in 1950. Since then he has flown at least one model of every Navy helicopter. Capt. Wirt commented that he was being recognized for "essentially nothing more than a full career of doing exactly what I had always wanted to do, being paid to do it, and loving every facet of it."

The Association also presented its heroic award to the Search and Rescue Crewmen of the Year. The winners were Lt. Dave Duval, Ens. Dave Landon, AMS1 Greg Silva and AT3 Mike Johnson, SAR crew of HC-1 Det 2 serving aboard *Midway* as part of CVW-5. They rescued the crew of a KA-6 *Intruder* which crashed during a night landing. The pilot and B/N ejected as their aircraft plunged into the sea. The SAR crew saved the two men although hampered by heavy seas and limited visibility. Additionally, some of the helo's automatic equipment was not working, further frustrating the rescue effort.

Hawkeye Training

Calspan Corporation, Buffalo, N.Y., under a contract from the Naval Air Systems Command, is developing a training system for the five-man aircrews of E-2B and C *Hawkeyes*. E-2 missions now include surface and subsurface surveillance, control of combat air patrols, search and rescue, and strike control.

Approximately 200 training lessons are in various stages of preparation. Five thousand drawings and 50,000 35mm slides are also being produced for the series of recorded lectures.

"Our objective is to teach crew members how to use their equipment and the relevant philosophy and theory as to why they should use it that way," explained Calspan's Dr. Robert C. Sugarman.



grampaw pettibone

Play it by Ear

The missile intercept flight was to be conducted at 30,000 feet and under ground-controlled intercept (GCI) at all times. The two *Crusader* pilots agreed on a 3,500-pound fuel bingo and an alternate military airfield. Since the section leader had experienced a previous generator failure, he briefed this as the "emergency for the day."

In the event of a generator failure, the plane experiencing the failure would fly wing on the other for an instrument approach to the home field. After the pilots obtained approach clearance and had begun descent, the ram air turbine (RAT) signal would be given. They would dirty up above the cloud layer and continue down in section.

Completing the 20-minute brief, they signed out for their respective aircraft, accomplished the preflights and starts and performed a section takeoff. The twosome entered the overcast at 800 feet and broke out on top at 2,800 feet. After reaching 31,000 feet, the section split and completed several intercepts, alternating as bogie and interceptor. As they approached bingo fuel, the section leader informed GCI they had to depart for home plate and advised his wingman to join up.

As they commenced the rendezvous, the wingman in the six o'clock position noted the gear indicators barbedpoled and resigned himself to an impending generator failure. The wingman, now without a radio, visually signaled the generator failure to the leader and the flight commenced their homeward en route descent.

At 23,000 feet and 20 miles from home-plate Tacan, the leader request-



ed a shift to approach control frequency. He checked visually for his wingman and discovered he wasn't there. The wingman, tired of pushing the stick over without trim, had popped the RAT and so had dropped back from the lead. The RAT gave him back the UHF receiver, but no transmitter or RMI. He switched to approach frequency in time to receive the manual frequency assigned, closed up on his leader and assumed a wing position for the descent.

The flight leader informed approach control of the nature of their predicament but, when interrogated, declined to declare an emergency.

Well along in the descent, approach control again asked the leader if he wanted to declare an emergency. After considering the fuel state and nature of the situation, the leader replied in the affirmative.

The section approached the top of the clouds at 2,800 feet and the leader gave the speed-brake signal after which

they slowed to 220 knots. The leader then gave the gear signal. The wingman placed his gear down and brought the wing up. However, he was slow in the transition and eased out ahead by at least two plane lengths. Looking over his left shoulder to keep the leader in sight, the wingman became IFR in the clouds. He looked at his instruments; the gyro horizon had tumbled 60 degrees right wing down and his airspeed was down to 140 knots.

His first reaction was to bring the right wing up; he pushed the stick to the left and booted left rudder. There was no reaction in the gyro. At this point, he noted the gyro off light was glowing and his airspeed was down to 120 knots. Once more he tried to bring the right wing up while the altimeter read 2,200 feet and the vertical glide indicator showed a 500-fpm descent.

The frustrated jockey moved the stick in all directions without getting a response. At 1,000 feet, he remembered the mountains below and, without further deliberation, pulled the face curtain. The Martin Baker performed beautifully. The abandoned *Crusader*, as expected, exploded on impact.



Grampaw Pettibone says:

Great horned toadies! This is a perfect example of how *not* to handle an emergency. These fellas had all kinds of VFR weather above that 2,800-foot undercast to get set up properly for a well organized, safe descent. I'm durn sure approach control would'a blessed any request for a level-off to join up and get configured properly for a precision approach to the field. Secondly, no one would have questioned a decision to proceed to their VFR alternate under these terrifyin' circumstances. (November 1967)

Basic Fundamentals

A section of A-4 *Skyhawks* departed NAS Home Plate on a routine cross-country instrument navigation flight. The en route portion was uneventful and flown as filed. A section penetration with individual final approaches to the destination airport was requested and approved. The descent was made at 75 percent power with speed brakes extended. Weather was clear with three to four miles visibility in haze.

Passing 7,000 feet, the flight was split up. The wingman followed vectors and altitude instructions until he retracted the speed brakes, leveling his A-4 at 1,200 feet. The controller issued the wingman a heading and instructed him to reduce to approach speed. Speed brakes were actuated and, passing through 220 knots, the gear and flaps were extended.

Power was added to maintain level flight at 150 knots. As the power was advanced through 80 percent, a popping noise was heard. Power was momentarily reduced to idle and then advanced to full throttle. As rpm increased, the popping returned, more pronounced than before. Again power was reduced. The pilot attempted several more times to increase power. Each time the popping resumed he reduced power until it stopped. Engine instruments indicated normal at all settings.

The pilot lost 600 feet of altitude during this evolution. Airspeed was allowed to fall to 130 knots with the aircraft in a nose-low attitude. At 500 feet AGL the pilot selected manual fuel but popping accompanied increased power. Now *in extremis*, at 125 knots and 200 feet AGL, the pilot reduced power, transmitted on the UHF that he was ejecting and pulled

the face curtain. Ejection went as advertised and the pilot was rescued.



Grampaw Pettibone says:

Holy mackerel! This is so fishy it stinks. A real setup for a nylon approach. The three basic fundamentals of safe flying are: (1) maintain flying speed, (2) maintain flying speed, (3) maintain flying speed. Preoccupied with a strange popping noise and becoming totally absorbed in solving that problem, this lad forgot to fly his aeroplane. A wise man learns by his mistakes. A wiser man learns by observing the mistakes of others. This lad lost his cool and lost his flyin' machine. Don't you miss the point! Always fly the aeroplane first!

I'm being a suspicious cuss but the popping symptoms here sound like a pressurization system problem to your old Gramps. We'll never know for sure. But I do know this was not any immediate action emergency — not with an engine developing good power and indicating normal readings. What a kettle of fish!



Osborn

From a Family Album

As an ensign in 1908, Ken Whiting was skipper of the submarine, USS Porpoise. One day he positioned his sub on the bottom of Manila Bay and entered one of the torpedo tubes. On pre-briefed signal the port was opened. Whiting emerged from the chamber and swam away to the surface. The C.O. had made a point in a very personal way -- escape from a stricken submarine, he proved, was feasible under such conditions.

He had also demonstrated remarkable verve and enterprise, qualities which stood him well throughout an unparalleled Navy career.

Mrs. Edna (Eddie) Whiting Nisewaner tells such stories of her father and has them well documented in a scrapbook which really is a biography of one of Naval Aviation's premier figures. The following account, extracted from that scrapbook, gives a fair glimpse of the man Whiting and his times.

Ken returned from the war aboard USS *Jason* -- sister ship of the colliers *Jupiter* and *Cyclops*. In the years to come, his interests were to be closely bound to *Jupiter*, which became the Navy's first carrier, USS *Langley*. As early as 1911, Ken had seen the possibility of transforming a collier into a flattop.

While stationed in Washington, working on an arresting gear design for *Langley*, as well as on details for *Saratoga* and *Lexington*, he served on the Committee on Limitation of Armament for Aircraft. Very much against disarmament, he was delighted when it was agreed that carriers would fall into an experimental category and would not be subject to the limitations.

He had been told he would remain in Washington for a few weeks. It turned out to be three years. The family took an apartment at the Dresden on Connecticut Avenue, returning to Ken's family home in Larchmont, N.Y., each Christmas and usually for the month of July.

Washington was a social place with command performances at teas and dinners, all of which added to Ken's distaste for living or serving in the nation's capital. He was eager to return to the active Navy and to join Chevy (Lt. G. deC Chevalier) in Norfolk to work on the arresting gear.

The family lived for awhile in the Brighton Hotel on California Street N.W., Washington, D.C. Wynne and Wallis Spencer lived there, too. (Wallis Spencer later divorced Wynne, another Naval Aviator, and married the Duke of Windsor.)

After Washington, duty aboard *Langley* was a dream come true. By the time Ken arrived in Norfolk, a group of officers were already working with a mock-up of *Langley's* deck, practicing takeoffs and landings. Chevy was in charge. These were tense times for the group. They worked hard. They relaxed completely and often.

The group lived at the Piney Beach Hotel on the naval

base. It was operated by the Navy for families of submariners -- who found room for the aviators.

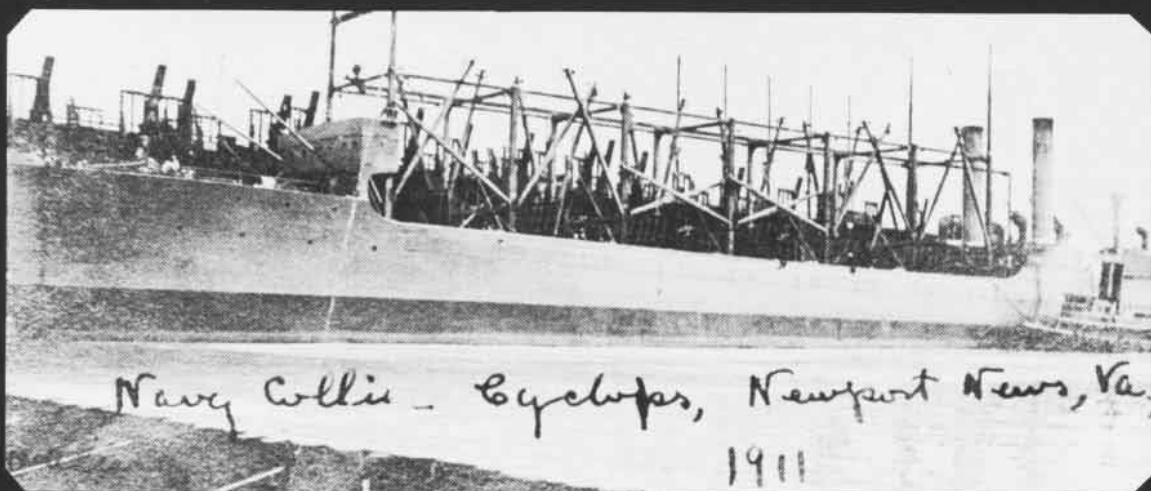
Langley was commissioned March 20, 1922, with Ken in command. In June, Captain S.H.R. Doyle took over, and Ken became executive officer. By fall, planes were beginning to fly on and off the ship. Ken made the first catapult shot. Griff (Lt. V.C. Griffin) was the first to fly off her deck; Chevy the first to land aboard. A landing required the aid of a flag waver who signaled the pilot if he was too low, too high, too fast, too slow. This job fell to Ken, who is considered to be the Navy's first LSO.

Ken and Chevy were fascinated with their work. They were brave men, full of spirit, who lived under the constant shadow of death. They worked in a field that was full of endless frustrations and delays. Each looked out for the other.

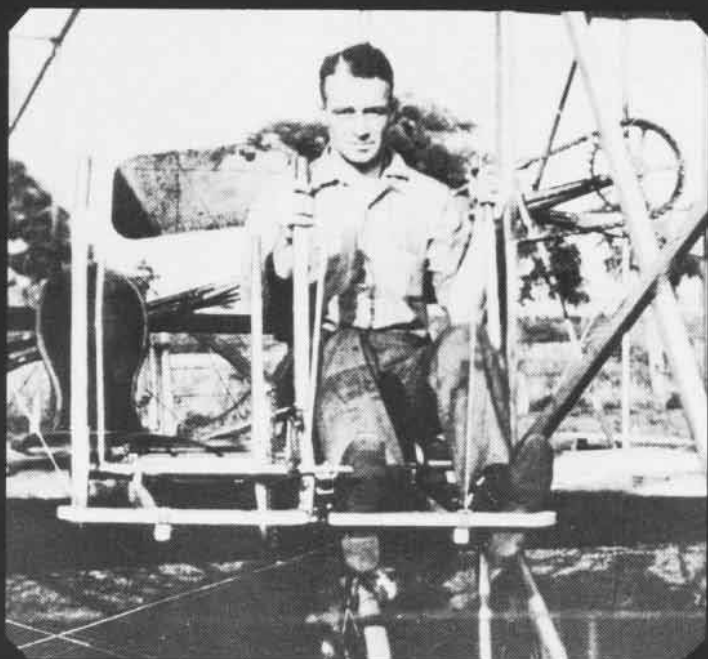
One day, Chevy stopped by the Whitings for a nightcap. Ken's wife, Edna, was irate because Chevy had awakened Baby Edna who was sick. But Chevy was full of gayety and told the ailing child he would fly by the window the next morning and signal her by gunning his motor.

Early the next morning, Edna and her daughter saw the plane and heard the motor being gunned. It flew past twice. The motor seemed to cough. Baby Edna insisted, "That's Chevy," and indeed it was. Minutes later he crashed. He died two days later on November 14, 1922. Ken had lost his closest and dearest friend. Naval Aviation and the country had lost one of its best -- an outstanding pilot who had contributed more than his share to the development of Naval Aviation and the carrier.

Langley headed for Pensacola for the winter where the weather was better and more work and training could be accomplished. Edna followed and set up housekeeping on the Bay shore, a rural area where cows were permitted to roam at will. More than once Ken would chase a stray cow



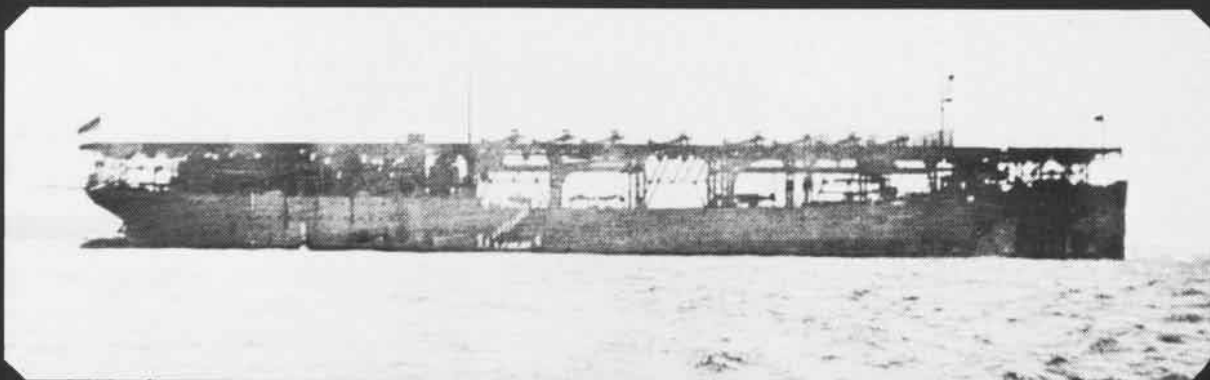
1



2



3



4

that had been trying to enter the Whitings' cottage via the window.

The ship was due to cruise to Panama. Edna refused to leave port until 24 hours after the ship had sailed, a wise decision since *Langley* broke down and had to return. The ship remained for another six weeks and then Edna returned to Larchmont to await the arrival of their second child. On a dark stormy night, April 14th, Ken came home on leave just in time to rush Edna to the hospital where Moira was born in the early hours of April 15, 1923.

Langley eventually returned to Norfolk and was preparing for a Cook's tour in and out of ports throughout New England for two months, "showing" Naval Aviation.

The ship began the trek north in June, stopping first at New York. Visitors swarmed over *Langley* and the aviators flew off and on while the ship was at anchor.

Edna and her two daughters followed the ship to Gloucester, Mass. While there, they stayed at The Inn — a typical mid-Victorian structure abounding in old ladies, who were charmed by baby Moira. The kindly old ladies would rock and walk the baby on the slightest provocation. Little Edna, now called Eddie, rode back and forth to the ship with Ken in his 24-foot boat.

One day Ken invited Edna to bring the girls aboard for lunch and to watch the planes fly on and off. It was warm and clear with just the right amount of breeze blowing. When the time came for the air show, Edna and Eddie were in the nets that extended from and below the flight deck. The ship's doctor, Surge Rhodes, held Ken's uniform cap. There was an air of worry and tension for Ken had never landed aboard before. Three planes took off. The first landed, scattering the fiddle bridges, which held up the fore, aft and athwartship wires. The plane tipped up on its nose. Surge and Edna gasped. Because Ken had taken off first, they thought it was he. Tensely they watched the second plane come to a stop at the barrier — a high sturdy fence which kept aircraft from going off the end of the deck. The third made a beautiful landing and out stepped Ken, grinning. He confided to Edna and Surge, "I had a dream last night and Chevy told me how to do it."

The ship was scheduled to give an air show in Boston Harbor but as she was leaving the dock a cable became entangled around the propeller. The ship couldn't move. The show had to go on — and did. The planes flew off and on, with the ship ensnared at the dock.

Ken stayed with *Langley* until mid-1924 when he received orders back to Washington to serve under Admiral William A. Moffett in the Bureau of Aeronautics. The admiral promised Ken he would not have to keep office hours and would not be in Washington long.

During this period Ken helped in the conversion of the cruisers *Saratoga* and *Lexington* and made himself famous for his testimony before the President's Board, better known as the Morrow Board. It had been convened to investigate Colonel William Mitchell's proposal that there be a single air force — which would strip the Navy of its air arm.

Ken was the Navy's star witness, delighting everyone with

his rebuttal to the cross-examination of Representative Frank Reid. Ken was strongly opposed to anything which would separate Naval Aviation from the Navy. He pointed out that it was treated like a stepchild when funds were being allocated. He presented a plan for reorganization so that officers would start aviation instruction at the Naval Academy and, upon graduation, go direct to Pensacola. After 10 years of training and service, they would become squadron commanders. In years to come, much of Ken's plan was adopted; some of its basic precepts remain today.

Many long hours were spent on Capitol Hill testifying, in the struggle to keep Naval Aviation and give it a chance to grow. Ken pointed to the one carrier, *Langley*, which was old and slow. He called for more and faster carriers and more planes. He noted that an attack on Guam or the Philippines would find the U.S. quite helpless.

By the fall of 1926, the family had moved to Moorestown, N.J. Ken was assigned to *Saratoga* which was being converted in Camden. He was right where he wanted to be.

The months spent preparing *Saratoga* for commissioning were happy ones. The results of many years of work and a long fight for funding were about to be realized in *Saratoga* and her sister ship, *Lexington*, which had been converted in Boston. Spuds Ellyson (Naval Aviator No. 1) was attached to *Lexington* and was to be her executive officer. *Saratoga* was commissioned November 16, 1927, with Captain Harry E. Yarnell in command and Ken his X.O.

The next January *Saratoga* was ready for sea. She headed for Panama, on her way to join the fleet in Long Beach, Calif. Getting *Sara* through the Canal was quite a feat as she was the largest ship (at that time) to make the passage. Edna sailed for the Canal Zone with Eddie and Moira early in February aboard SS *Santa Maria*. Ken was waiting for them.

The interlude at Panama and a leisurely, 12-hour voyage through the Canal aboard a Dutch freighter gave Ken a chance to rest his injured back. (He had been flying in a seaplane and was standing on its top wing attempting to reach the hook being lowered from *Saratoga* to bring the plane aboard. He lost his balance, when a wave slammed the plane against the ship, and fell to the pontoon. He landed flat on his back. The plane was hoisted aboard with Ken lying motionless on the wing.)

After a brief stay, Edna and the girls sailed on S.S. *President Cleveland* for Long Beach, and *Saratoga* resumed her trip.

The unhappy news of Spuds Ellyson's death reached the Whitings in Long Beach. He had been killed when his plane crashed in Chesapeake Bay, en route to Annapolis from Norfolk to the bedside of his very ill daughter. Another close friend was gone. Still, Ken was grateful for the others like Pete Mitscher, Squash Griffin and George Murray who could educate many of the newer naval officers in operating their planes aboard the carriers. Ken often felt alone, however. He was, in many ways, a solitary man.

In the fall of 1928, the ship sailed to Bremerton, Wash., for overhaul. For the next two years the Whitings continued to lead a sort of gypsy life. After a brief sojourn in

Bremerton, at the Kitsap Inn, it was back to Long Beach and ultimately to Panama and war games.

By June 1929, Ken received orders to be chief of staff to Admiral Butler, whose flag flew from *Sara*. Ken was very popular with both officers and enlisted men, and served aboard longer than anyone else. Despite his order that there would be no farewell gifts, the crew later presented him with a new sword. A small duffle bag containing an egg and a miniature ditty box made from a plank of the flight deck, which appeared on Ken's desk with a card "To a good egg," was the farewell gift from the officers. It became Ken's most prized possession. Now he was truly a plank owner.

That summer Adm. Butler moved his flag to Coronado. The family settled in a house on C Avenue and soon had a large quarantine sign on the door. Both girls had whooping cough, which Moira followed up with mumps.

Late in the fall, Edna was called home as her mother was ill. She left Ken and little Eddie to fend for themselves. Before leaving, she packed all the silver and had everything ready for moving. Eddie cooked for Ken but it did not take Ken long to discover his daughter could cope only with eggs and bacon or lamb chops, creamed carrots, potatoes and peas. After a week, he and Eddie had Sunday night supper for 25 guests. The flatware had to be borrowed as Edna had locked the trunk which contained the silverware and taken the key. The menu was elegant — and prepared aboard ship. The guests stayed to the wee hours. Eddie wondered why Ken wanted such a party. The answer was soon apparent. Return invitations for dinner were soon forthcoming. No more lamb chops.

Early in 1930, *Saratoga* and the Whitings headed east once again, this time to Norfolk. Ken was assigned as C.O. of the naval air station.

Before taking command, he led the first mass flight of U.S. planes in an air show over New York.

The air station at Norfolk was involved with experimental work. Culis Bartlett was executive officer. Mel Pride, Jack Tate, Country (E. P.) Moore and a host of other *Langley* sailors and old friends were all working together.

Amelia Earhart dropped in for a speaking engagement. The field at the air station was notoriously poor, full of holes and mud puddles and devoid of grass. On landing, Amelia skidded. Her red Lockheed *Vega* flipped upside down and her head was gashed. Amelia stayed with the Whitings, fulfilling her speaking engagement. She departed, leaving her busted plane for Ken to have repaired and returned to her in New York.

In the spring of 1932, the nation was shocked by the kidnapping of the Lindbergh baby. The search was on to find the child and no clue was left unchecked. Ken had an urgent call from John Hughes Curtis, a prominent Norfolk boat builder who was well known in society circles. Curtis felt he had information about the lost child and had to see Lindbergh at once. Arrangements were made for Curtis to be flown to Hopewell, N.J. Of all the clues that had poured into Hopewell, this one was the only one that Lindbergh felt might be true because Curtis knew that the baby had a piece of flannel sewed inside its shirt with light blue thread.

This had been a closely guarded secret. As a result of the visit to Hopewell, Lindbergh came to Norfolk and stayed aboard the Curtis yacht.

The baby was supposedly aboard a Gloucester fisherman sailing down from Boston. A rendezvous was arranged off Cape Hatteras. The baby was to be transferred at sea. Ken had air station planes scout the area. He met with Lindbergh and Curtis aboard the yacht.

Lindbergh neither drank nor smoked but he delighted in chocolate cake which the Whitings had every Sunday. Ken put half the cake in a shoe box to deliver to the anxious Lindbergh. Next day the Norfolk papers ran a banner headline. "Ransom money delivered in shoe box."

Ken warned Lindbergh of a possible hoax as he knew it was impossible to sail from Boston to the Cape in the time stated by Curtis. Lindbergh was leary, too, but felt he had to follow through because of the blue thread clue. After the rendezvous failed and the Navy could find no Gloucester fisherman, Lindbergh returned to Hopewell and Curtis went to jail.

After two years at Norfolk, the Whitings were off to Newport, R.I., where Ken attended the Naval War College. He enjoyed the war games played with toy ships and was impressed with the many sharp minds in the class. Squash Griffin and Ernie King were among them. Early in 1933 the tragic loss of the dirigible *Akron* resulted in the death of Admiral Moffett. Ernie King replaced him as Chief of the Bureau of Aeronautics.

Ken received orders to command *Langley*, which was based in Coronado. For the first time, the family traveled as a group to their new base. Although it was a harrowing trip, once at Coronado, Ken was once again working with the operating Navy.

In the spring of 1934, Ken was ordered to *Ranger* which was being built in Newport News, Va. This duty lasted only a few months — until he became C.O. of *Saratoga* in New York. He was proud and pleased, yet wary. After the change-of-command ceremony, he commented, "Now I've got the bull by the tail."

During his year as *Saratoga's* skipper, Ken was beloved by his crew for his many escapades. Returning aboard late one night off Guantanamo, he called the attention of the duty officer to a list to starboard. While the officer of the deck was checking, Ken disappeared off the starboard gangway into the dark waters. The crew searched the area. There was great excitement, in the midst of which Ken appeared on the port gangway. He had swum under the ship to assure himself that she was not in the mud.

Sara was home-ported in Long Beach, Calif. The passage through the Canal with a big ship was always harrowing. But this westward trip in 1934 was especially so. The giant ship seemed to get away from the pilot. Finally, coming out of one of the locks, the pilot lost control. Ken relieved the pilot and, with the skill of a master, straightened the ship out and took her through the rest of the way.

From his 15th floor apartment on the waterfront, Ken could see his carrier riding at anchor. He often spent the wee hours of the night sitting on the ledge by the gargoyles



5



6



7



8



9



10



*"The Skipper" off for a run.
The improved Tonnerville Trail*

*U.S.S. Langley
Yorktown, Va.*

11

outside his window high above the Pacific Ocean observing the stars and pondering the questions "Where do we go from here?" "How far can a man go — on the sea and especially, in the air . . . to outer space, perhaps?"

On July 5, 1935, off Santa Monica, Ken was relieved by a newcomer to aviation — Bill Halsey, who had just learned to fly at Pensacola. (One had to be an aviator to command a carrier and there were very few officers senior enough, at the time, who were aviators.)

Halsey had only civilian clothes with him since none of his personal belongings had arrived. Ken loaned him a uniform, a very snug fit — so snug that the buttons were strained. Halsey used Ken's uniforms until his own arrived, six weeks later.

Leaving *Sara* was a sad occasion for Ken. He had followed her career from the drawing board to command. He had grown with her. An era had ended for him.

The Whiting family sailed in grand style for Hawaii where Ken was to command the naval air station at Pearl Harbor and Patrol Wing Two.

It did not take Ken long to find that many things were needed at the station. He found he had bombs for his planes, but no fuses. After many letters, fuses for the bombs arrived.

He discovered that a number of chiefs and other enlisted men and their families were quartered on the island but there was no school. Before long one was built. Ken insisted it be painted red and have a large bell outside.

The sleepy little air station soon became a bustling, busy, growing place. As more planes arrived there were more personnel, which in turn meant more quarters.

The station's planes flew daily, mostly to French Frigate Shoals, often to tiny islands and atolls. Midway, Johnson, Howland and Baker Islands were all scouted as possible bases in case of war.

Amelia Earhart, flying from the West Coast on a leg of an around-the-world trip, landed at Army's Schofield Barracks early one March morning in 1937. Ken was on hand when she was ready to take off from Luke Field. The Navy advised her to take off in a trade wind direction. The winds were very light, from a southerly direction on the surface but from a trade wind direction just above the ground. This caused a crosswind at mid-field.

The Army advised her to take off, in a southerly direction. Amelia had never taken off with a full load. (Her copilot had always been at the controls on such occasions.) On this morning, she decided she would take the plane off, following the Army's advice.

At mid-field, the plane ground-looped and came to rest on its nose. As Amelia walked away from the smashed plane, she said to Ken, "Every time I see you I get into trouble." A little over a year later, she again attempted to fly around the world, only to be lost in the Pacific. Ken sent one of his patrol planes to search for her. *Lexington* also joined the fruitless search.

Each year the Pacific Fleet rendezvoused in Hawaii for war games and Pearl Harbor abounded in activity. Battle-

ships, cruisers and destroyers were everywhere.

Few realized that the war game known as Fleet Problem XIX was a dress rehearsal for December 7, 1941. Ken's patrol boats were supposed to scout the seas for an enemy force. There were too few planes and pilots to patrol from all directions. But Ken and his forces patrolled to the northeast, north and northwest with success.

Unfortunately, the usually clear, sparkling weather around Pearl Harbor was unusually poor. Several planes were lost with all aboard. One taxied into the dock during a night flight. When the crash alarm sounded, Ken jumped into his car, sped to the dock and dove into the submerged wreckage in an attempt to save the pilots. He retrieved two bodies.

Following Fleet Problem XIX, there was a great hue and cry in the local papers about the unnecessary loss of life. Many half truths were printed and an investigation ensued. Ken survived the investigation and, in fact, was commended on his handling of his patrol wing. Many of his suggestions for the improvement and expansion of the air defenses of the islands were adopted.

In the spring of 1939 Ken was ordered to New York as Inspector of Naval Aircraft. The family left in June with much fanfare. As usual the popular Ken had made a host of friends, in and out of the service.

Eddie was married in July and moved to Annapolis, Md., while Ken, Edna and Moira settled down in Larchmont. Both he and Edna became active in sailing again.

However, Ken was a sad, lonesome man. He had been passed over twice for admiral. He hated riding the commuter train to New York. Retirement was just a few months away. Hitler invaded Poland. War clouds gathered and the U.S. military seemed to tense up for what lay ahead.

Retirement time came, but Ken was retained on active duty. He longed to go to sea again instead of inspecting aircraft factories and making speeches.

In early 1943, Ken took command of NAS New York. The family moved into quarters there.

On the Thursday before Easter, he flew to Washington on business and to see old friends. He wanted to air his thoughts on improving the war effort, especially in the Pacific. He was to fly back Saturday, but on Saturday morning he did not feel well. That night he entered the Bethesda Naval Hospital where he died in the early hours of April 24, 1943 — his 31st wedding anniversary. He had been ill for 19 hours with meningitis of the bloodstream.

Edna fulfilled Ken's wish to be buried at sea, in Long Island Sound near Execution Light.

In July, Whiting Field was commissioned at Pensacola.

In the following months Edna spent a great deal of time and energy trying to have a carrier named for Ken. Since new carriers had always been named for battles, she was not successful. However, she christened a seaplane tender USS *Kenneth Whiting*, on January 11, 1944, in Seattle Wash.

Early in December 1946, Edna died at age 61. She, too, was buried off Execution Light.



12

1. Ken's handwriting identifies Cyclops. After seeing this ship, sister to collier which became Langley, he envisioned a deck constructed atop her as a mobile airfield.

2. Naval Aviator No. 16 in truly open cockpit.

3. Cdr. Whiting poses in front of BuAer building during a tour working for Adm. Moffett.

4. CV-1, circa 1923.

5. In 1936 visit to French Frigate Shoals, an advanced base for Pacific exercises, Ken, then Ford Island C.O. and Commander, Patrol Wing Two, met with LCdr. Junius Cotton and RAdm. Ernest King.

6. Mrs. Whiting, Moira and Edna.

7. At 1935 Saratoga change of command, held in port at Santa Monica, Halsey waits his turn to speak. He's wearing Ken's snug-fitting blues.

8. Committee on Limitation of Armament for Aircraft met in Washington after WW I. Ken is second from right, back row. Adm. Moffett is third from right, front. LCdr. H.C. Mustin is behind him.

9. The C.O. addresses his officers at NAS Ford Island. Station's official vehicle is at right.

10. As Langley X.O., Ken explained arresting gear to President Harding, light coat, hands in pockets. At far left is Lt. V.C. Griffin. Lt. Surge Rhodes is at extreme right. He was the only aviation doctor in the Navy at the time. Between the Chief Executive and Ken is Capt. S.H.R. Doyle.

11. Ken dips off Langley's bow in an Aeromarine.

12. Plaque honoring Ken was placed by his mother in St. John's Episcopal Church, Larchmont. She found quote in Naval Academy's "Lucky Bag." It is from Hamlet.

13. Wearing both submariner dolphins and aviator wings, Capt. Ken Whiting posed for this picture while C.O. of NAS New York.



13



Thirty-five years ago, in the midst of World War II, a naval auxiliary air station was commissioned near the small town of Milton, Fla. It was the sixth and largest under the command of the Naval Air Training Center in Pensacola, 28 miles to the southwest. The new NAAS was called Whiting Field in honor of Captain Kenneth Whiting, USN, one of Naval Aviation's early pioneers.

As Capt. Whiting's widow and high ranking Navy and government officials listened on a sweltering July 16, 1943, the commandant of the Naval Air Training Center, Rear Admiral G. D. Murry, paid tribute to the man who had been "...one of the pioneers in the building of submarine forces, who later pioneered in Naval Aviation." Adm. Murry spoke of the needs to be met and of the hope that NAAS Whiting Field through the years would become as distinguished as the man for whom the station was named.

Kenneth Whiting's career began with his graduation from the Naval Academy in 1905. His early career included service aboard three submarines. In 1914 he was taught to fly by Orville Wright and became Naval Aviator No. 16. He was then assigned as officer in charge of the Naval Aeronautic Station, Pensacola, Fla., then the only naval air station in the United States. During WW I he was awarded the Navy Cross for service as commanding officer of the first U.S. aeronautical detachment to reach France. In 1922, he helped to fit out the experimental aircraft carrier, USS *Langley*, and later served as her executive officer. After returning to shore

duty, he helped in the conversion of the battle cruisers *Lexington* and *Saratoga* to aircraft carriers.

Capt. Whiting continued his naval service through the 1930s and early 1940s with various sea and shore assignments. His last duty was as commanding officer of NAS New York. He died while on active duty in April 1943 at the Naval Hospital, Bethesda, Md., three months before Whiting Field was commissioned.

The naval air station which bears his name has always been charged with the mission of training Naval Aviators. Many different models of aircraft have flown from Whiting's North and South Fields in this endeavor. In addition to training planes, heavy and medium bombers were based at Whiting for over two years at the end of WW II. The Navy's first jet training unit, J4U-1, and the *Blue Angels* also flew at Whiting before the Korean War.

When NAAS Whiting Field was commissioned in 1943, many buildings were still on the drawing boards but construction progressed at a phenomenal pace, as did many such wartime projects. Commissioning took place just 14 weeks after construction began, and planes were already operating from South Field. Shortages of materials and skilled workers were overcome with zeal and ingenuity. Everyone involved in the construction realized the need to get the station operational, as ever-increasing numbers of students reported to the Pensacola area for flight training.

Two weeks before commissioning, a unit of Squadron Three brought its single-engine SNJ *Texans* from Saufley

Field, near Pensacola, and moved onto Whiting's South Field. Soon it was joined by another unit from Chevalier Field, Pensacola. Four months later, in November 1943, Squadron 8-C began flying the twin-engine SNBs at North Field. To maintain these aircraft, Whiting Field boasted of having the only exclusively-Wave mech line in the Navy during the war. Whiting's Waves were also involved in advanced ground training. They operated gunnery trainers and taught radio and instrument flying in the station's Link flight simulators.

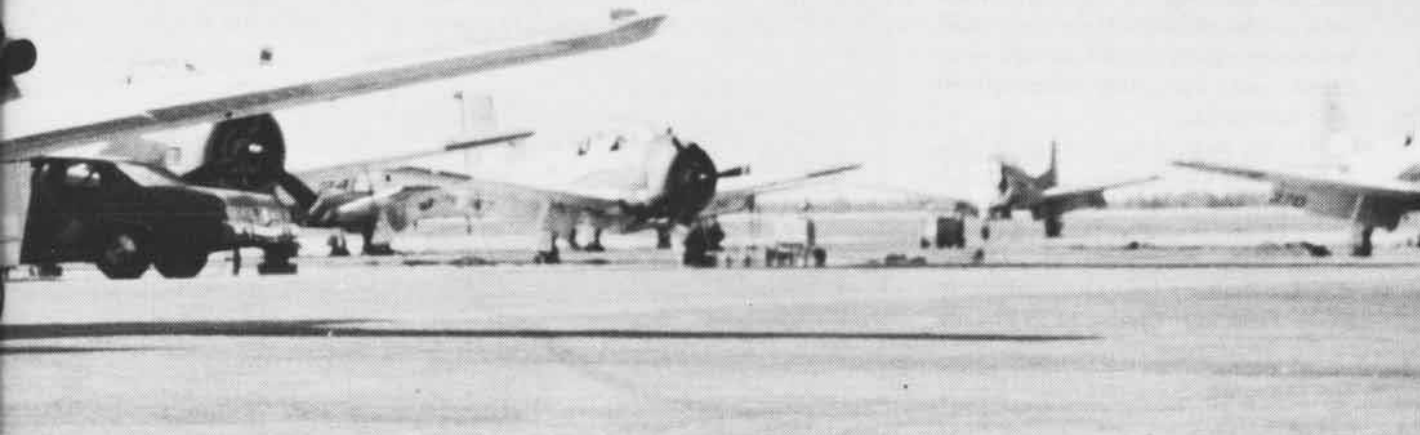
November 1943 marked the completion of Whiting Field. North and South Field runways were finished, the west gate was opened, and grateful tenants moved into the nearby Owens Court housing area.

By September 1944 the war in the Pacific had turned in favor of the Allies and the invasion of the Philippines was under way. The Allies hoped for victory in Europe within months.

Whiting Field became involved with the war effort in a different way in the summer of 1944 when a prisoner of war camp was constructed near North Field. The first 100 prisoners arrived on July 12. Established through the efforts of the Naval Air Basic Training Command and Army authorities at Camp Rucker, Ala., the camp furnished labor details for construction and soil erosion projects.

At war's end, the need for pilots was no longer pressing. Flight training was suspended and many students accepted immediate optional discharges. Chapter One of Whiting's history thus ended and the station looked

By Ens. Sheila A. Shropshire



forward to an uncertain future.

Whiting Field had proven its worth and capabilities, however, and survived the base closures of the postwar years, continuing as a training installation. A buildup began in the fall of 1946 when bombers from NAS Hutchinson, Kans., and Miami, Fla., were brought in. With additional aircraft, Whiting Field was redesignated a naval air station and placed under the control of Naval Air Advanced Training, Jacksonville, Fla.

Carrier qualification units moved to Whiting's South Field from Jacksonville and Miami in November 1946. Using several outlying airstrips and the aircraft carrier *Saipan*, pilots perfected their carrier landing ability before they joined fleet squadrons.

A year later, the bombers were transferred from Whiting to Corpus Christi, Texas. The air station continued basic SNJ instruction and, in December, was administratively returned to the Naval Air Basic Training Command, Pensacola.

The winds of change and of politics could be heard throughout the Pensacola naval complex in 1947 and 1948. Whiting Field was rumored to be closing as Texas political groups in Washington were campaigning for enlargement of Texas air installations. The rumor reached the print stage in May 1948 when the *Pensacola Journal* stated: "The future of Whiting has been unsettled for months. Used last year for training crews of heavy bombers and for instrument flight training, unofficial word was received early this year that the station would be closed." The rumors seemed confirmed when the Navy Department announced that NAS Corpus Christi would continue with undiminished activity. Florida political forces on the local, state and national level sprang into action to prevent the closing of the base that had become so important to northwest Florida and to the Navy. Their efforts were successful.

Whiting was redesignated an NAAS in the spring of 1948 with 50 SNJs, 43 officers and 420 enlisted men from Corry Field, Pensacola, on hand.

The Navy's first jet training squadron, Jet Training Unit One, arrived at North Field in the spring of 1949 and,

in August, jet training solos in the TO-1 began. Then came the *Blue Angels* and their F8F *Bearcats*. Whiting Field enjoyed the prestige of playing host to the flight demonstration team although this role was short-lived. With the outbreak of war in Korea in June 1950, the *Blue Angels* went into combat and the jet training units moved to Kingsville, Texas.

Whiting Field concentrated on basic pilot training again — for another war effort. There were more students on board in 1953 than at any other time. Monthly flight hours attributable to Whiting units peaked at 31,616 and nearly 22,000 scheduled instructional flights in the month of June 1954. The total for the fiscal year was 240,057 instructional hours flown, with 2,722 students completing the primary phase of training.

After the Korean War, the mid-Fifties brought two new aircraft to Whiting and more changes in its flight training. The Beechcraft T-34B *Mentor* was introduced in 1955-56, relieving the SNJ *Texan* as the primary trainer. Soon thereafter, the T-34B was transferred to Saufley Field. Meanwhile, the North American T-28 *Trojan* was introduced for instrument and tactics work. The SNJ was retired and for the next two decades all students began primary flight instruction in the T-34B at Saufley with many transferring to

Whiting to continue their training in T-28s.

Other syllabus changes took place in the late 1950s. In 1957 Basic Training Group Three at South Field was decommissioned to make room for a gunnery unit from Barin Field. In December 1959, multi-engine training was moved from Sherman Field (NAS Pensacola) to Whiting for a short time.

In the mid-Sixties the first major construction at Whiting since its original building program during WW II occurred. The \$5.5 million of construction included three enlisted quarters, an aviation maintenance hangar, a BOQ, recreational improvements, and improved quarters for women enlisted personnel. There was also extensive remodeling of existing structures.

As part of a major reorganization of the Naval Air Training Command, Whiting Field became headquarters for Commander, Training Air Wing Five in January 1972. Since then the air station and all flight training there have come under the operational command of ComTraWing-5.

Whiting Field took on a different breed of flying machine in January 1974. After 30 years of training fixed-wing aviators, it began rotary advanced training as well, when Helicopter Training Squadrons 8 and 18 moved to Whiting from Ellyson Field. South Field became a helicopter base supporting the H-57 and the H-1, while





North Field was home for three fixed-wing squadrons and the T-28. Since then, all graduates of Navy helicopter training have received their wings at Whiting Field.

The air station resumed primary prop instruction in November 1976. Since then, approximately 80 percent of all student aviators have begun their flight training in one of the three VT squadrons at Whiting — VTs 2, 3 and 6 — with the remaining 20 percent going to NAS Corpus Christi.

In the primary stage, students learn basic techniques for takeoffs, landings, spin and stall recoveries, aerobatics, instrument and formation flying. Students completing primary training at Whiting move to other air wings for intermediate and advanced strike (jet) or remain at Whiting for intermediate maritime (prop) or rotary (helo) training. Corpus Christi provides advanced maritime training. (*NANews*, March 1977).

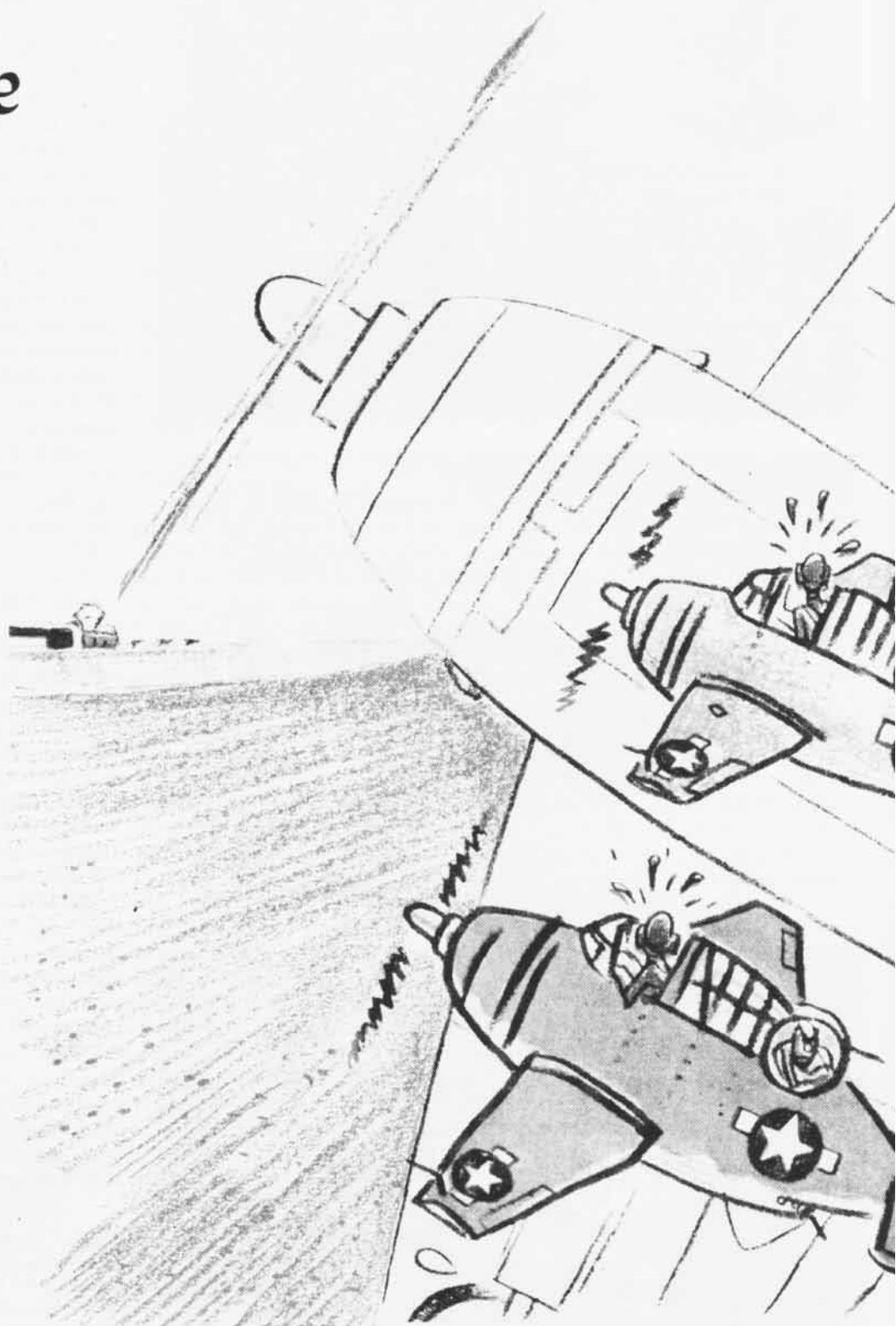
Those remaining at Whiting for transition to helicopters are taught basic helicopter flight techniques in the TH-57 *Sea Ranger* by HTs 8 and 18. Their final training aircraft is the H-1 *Huey* in which their basic helicopter skills are sharpened, instrument flying is emphasized, and carrier landings are made on *Lexington*.

The latest aircraft to be based at Whiting Field is the T-34C *Turbo Mentor*, a brand new turboprop which will soon replace the aging T-28.

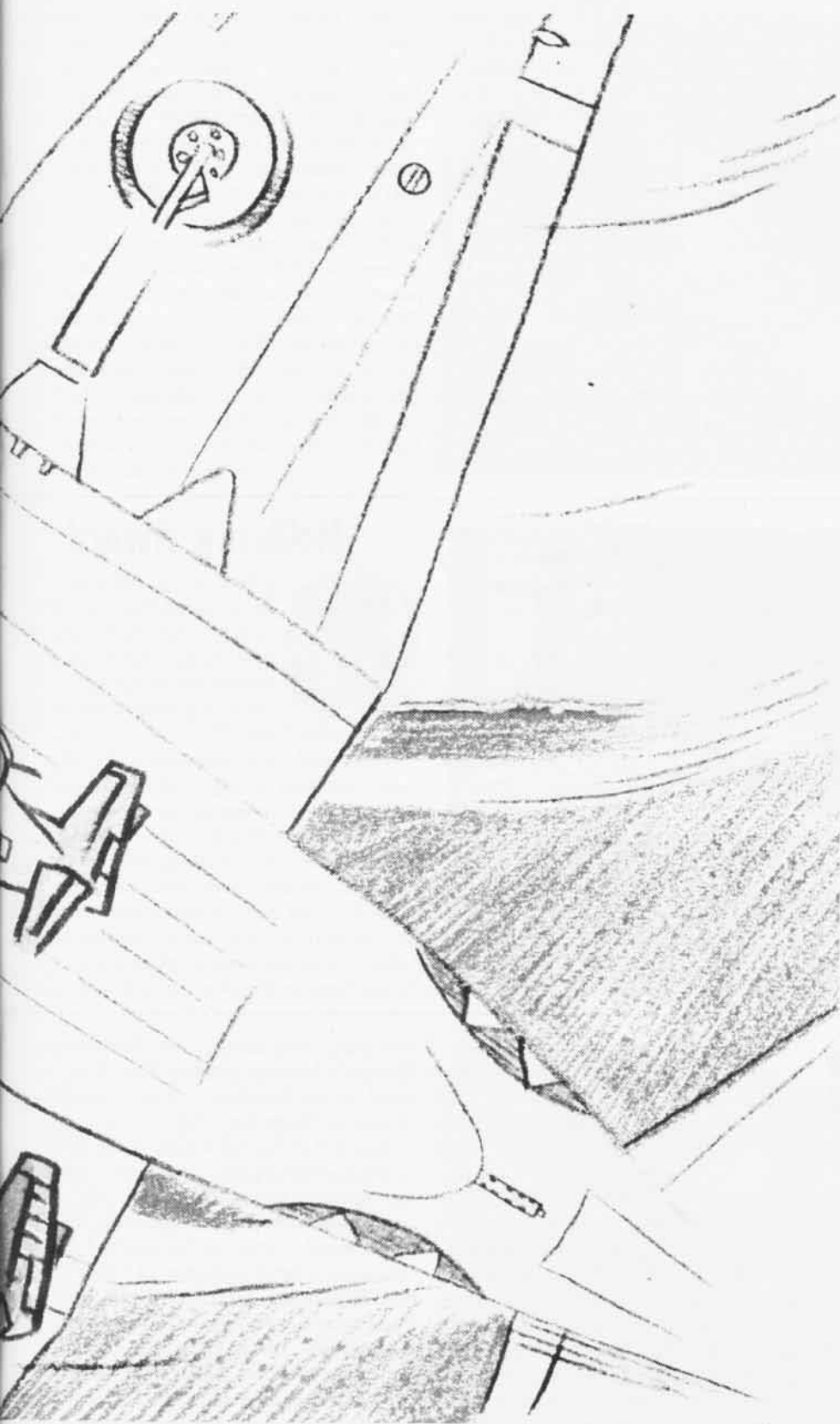
As NAS Whiting Field transitions to the T-34C, the cycle of change and adaptation begins again as it has so many times in the past. Whiting Field looks back with pride at the thousands of aviators it has trained for service in the fleet, the men and women who have gone through a grueling flight program to become Naval Aviators. They are the affirmation of the station's motto "Training the finest aviators in the world."

Student and instructor in TH-57 *Sea Ranger* during primary helo training, top. Center, WW II SNB-2 advanced trainer. T-28 Trojan, Whiting Field workhorse trainer for over 20 years, bottom.

The Message Then...



When you look out and see the
toward you for a join up -- its



...Still
Applies

lly of a plane squashing
ilbert!

© RLC



'Jimmy' Thach Award



The *Topcats* of VS-31, Cecil Field, have received the 1977 Admiral "Jimmy" Thach Award, which is given to the Navy's outstanding antisubmarine warfare VS or HS squadron. Only one award is given in a field of 24 competitive squadrons.

The trophy was first presented in 1970. Sponsored by Lockheed, it recognizes Adm. Thach who was famous for his dedication, flying achievements and his development of tactics during WW II. He distinguished himself as the

first commander of Task Group Alfa and later as Commander, Antisubmarine Defense Force Pacific (redesignated Antisubmarine Force Pacific, and later ASW Force). Adm. Thach helped to refine many of the hunter-killer group tactics used by ASW squadrons today.

The silver bowl trophy, retained by the winning squadron for one year, is replaced by a replica when the trophy passes on to the next winner. Nominations are submitted to CNO by fleet commanders, based on achievement in weapons systems readiness, combat readiness, performance in combat exercises and contributions to weapons systems and tactics development, and to ASW aviation.

The *Topcats* are also winners of two other Lockheed-sponsored awards: the 1977 Captain Arnold Jay Isbell Trophy for air antisubmarine warfare excellence (*NANews*, July 1978) and the 1977 Aircraft Maintenance Award for air antisubmarine warfare squadrons (Atlantic Fleet).

VS-31 began 1977 by participating in *Caribbean Readiness Exercise 1-77*, as part of CVW-7 embarked in *Independence*. At the end of March the *Topcats* began a Med cruise aboard *Independence*. They flew first in support of a joint U.S.-Spanish amphibious landing exercise, *Phiblex 4-77*, followed by a NATO exercise, *Dawn Patrol*, during which several Soviet subs were detected. The *Topcats* pro-



McClusky Award



The VA-105 *Gunslingers* of Cecil Field have won the 1977 C. Wade McClusky Award for meritorious achievement as Navy's outstanding attack squadron.

The award, established in 1971, is named for Rear Admiral McClusky. As commander of a carrier air group in the Battle of Midway, he led his squadron in an attack against four Japanese carriers under heavy anti-aircraft fire and fighter opposition, inflicting sufficient damage on the flight decks to put the carriers out of action. He suffered a shoulder wound from

AEW Excellence Award



VAW-123 is winner of the 1977 AEW Excellence Award as Navy's outstanding airborne early warning squadron.

The trophy, sponsored by Grumman, was first presented in 1976. It is a glass-enclosed model of USS *Enterprise* which is retained for one year by each winner, and is replaced by a replica for permanent retention.

The Chief of Naval Operations makes the selection from nominations

submitted by the fleet commanders, based on achievement in operational readiness, safety, contributions to tactics and weapons systems development, and retention.

In June 1967 VAW-123 became the first East Coast E-2A squadron to deploy to WestPac, as part of CVW-17 aboard *Forrestal*. The squadron transitioned to the E-2B between November 1970 and April 1971. A year later it deployed to SEAsia on three days' notice, providing support for *Saratoga* and Air Wing Three for the next eight months during seven Gulf of Tonkin line periods. The last part of 1973 was devoted to E-2C transition training at Grumman Aerospace Corporation in

Bethpage, Long Island, and at Norfolk. VAW-123 became the first fleet E-2C squadron with delivery of its initial aircraft in November 1973.

In 1977, the *Screwtops*, although land-based during May and June, flew in support of Operation *Aloud Gulf*, a communications support operation for *Solid Shield*. Deploying to the Med in July aboard *Saratoga* as part of CVW-3, the *Screwtops* participated in Air Force exercise *Creek Star*. Later, during *National Week XXIII*, the squadron maintained a 100-percent sortie completion rate even though a substantial portion of the exercise was spent in a round-the-clock operations. VAW-123's participation in *Display*

vided around-the-clock CV coverage in U.S.-NATO exercises *ASW Shootout* and *Passive Exercise*. August operations were dedicated to a Sixth Fleet operation, *National Week XXIII*. The last major operation of the deployment was *Display Determination* with forces of Italy, Greece and Turkey.

In early October VS-31 launched four S-3As on *Viking Venture*, the first S-3As to cross the Atlantic east to west. Led by squadron C.O. Commander Henry L. Phillips, Jr., the aircraft arrived at Cecil Field, one day and three stops after leaving Rota, Spain. The deployment ended when the remaining contingent of VS-31 personnel returned to Cecil Field at the end of October.



enemy shrapnel. For this action he received the Navy Cross. He was awarded the Distinguished Flying Cross for leading a division of fighting planes for the initial attack on Wotje Atoll in the Marshall Islands, in which he repeatedly bombed and strafed the enemy, causing severe damage. Later, while leading a combat patrol, he made contact with two enemy bombers which were trying to attack the carrier. He led repeated aggressive attacks upon the bombers, which destroyed one and seriously damaged the other. The award recognizes the leadership and courage that characterized his career.

The trophy is sponsored by Vought and consists of an eagle mounted on a

wooden base. The winning squadron, selected by CNO, retains the trophy for a year and returns it in time for engraving and presentation to the next winner. Each squadron receives a replica, which remains on permanent display and is inscribed each year with the name of the winning squadron.

The areas of consideration are combat exercises, achievement in combat weapons systems readiness, contributions to tactics and weapons systems development, and attack aviation.

The *Gunslingers* placed first in both of the competitive cycle bombing derbies and were chosen as ComLAT-Wing-1 Attack Weapons Squadron of the Year. They have won the Battle E for the second time in three years,

have achieved 10,000 accident-free hours and the lowest number of deficiencies in the air wing during the Navy technical inspection.

The squadron returned to Cecil Field after a Med deployment aboard *Saratoga*. The cruise was marked by participation in a number of exercises, including Sixth Fleet's *National Week XXIII*; Combat Readiness Assessment Exercise in September in the Aegean Sea, during which the *Gunslingers* delivered 100 percent of their ordnance on target; NATO exercise *Display Determination*; and finally a large naval exercise, *Iles D'Or*, with French, British, Italian, German and Dutch forces.

Commander Franklin H. Saunders is the squadron skipper.

Determination included control of attack and ASW aircraft through a maze of flight corridors which constantly changed direction as they wound their way through restricted air spaces. Other operations followed, including *Iles D'Or* and *Poopdeck*, an anti-air warfare exercise conducted with Spanish forces.

Homeward bound in December, an around-the-clock alert during their Atlantic transit enabled them to locate and report the position of two Russian TU-95 *Bears* which had been reported in the vicinity of the task group.

The *Screwtops* won the Atlantic Fleet Battle E for 1976-1977. Commander Robert A. Allen is C.O.



In today's publicity-oriented world, OJ may be identified as the juice of a particular citrus product or a sports figure dashing through airports. In a different age, on board Navy light cruisers of the early Thirties, OJs were the catapult observation airplanes.

Much is said today about the increasing size of fleet airplanes; the F-18 *Hornet* represents a major effort to turn back this trend. Fifty years ago, as carrier and catapult aircraft came into their own, the same trend was a concern. With the availability of smaller, higher-powered radial engines, the Navy pushed to fulfill the needs for smaller ship-based aircraft. For observation use, to be catapulted from the light cruisers, the Bureau of Aeronautics ordered two experimental prototypes in 1930, based on the bureau's own Design No. 86. Berliner-Joyce (then a newcomer in the military aircraft business) and Keystone built these prototypes as the XOJ-1 and XOK-1, respectively, using Wright R-975A *Whirlwind* engines. Keystone's prototype never reached trials, so the Berliner-Joyce, repowered with a P&W R-985 *Wasp, Jr.* was ordered as the OJ-2. A total of 39 of these conventional, fabric-covered, open-cockpit convertible (landplane/seaplane) biplanes were purchased initially for fleet use and served with VS-5B and VS-6B and later directly for reserve squadrons.

The XOJ-1, meanwhile, was converted to flight test a new high-lift system, the Zap Flap, which, with auxiliary ailerons above the wing to allow full span highly effective flaps, promised reduced takeoff and landing speeds for future shipboard aircraft. Zap Flap tests continued with other aircraft into the WW II period, but this flap system was not adopted for production aircraft.

While the OJ-2s entered fleet service, one airplane was updated as the XOJ-3 to compete with newer designs for further production orders. Unsuccessful, it joined fleet aircraft, as an OJ-2, transferring to reserve squadron use before eventual retirement of all the OJ-2s, prior to U.S. entry into WW II.

During past years, when North American (now Rockwell) aircraft flew with J company designations (the SNJ *Texan*, FJ *Fury* series, and AJ and A3J — now A-5 — heavy attack types), the source of J for North American was always a puzzler. It traces back to the various Berliner-Joyce fighter designs and the OJs, for North American became the successor company to Berliner-Joyce in 1934.



OJ-2



XOJ-3



OJ-2

O.J.



OJ-2

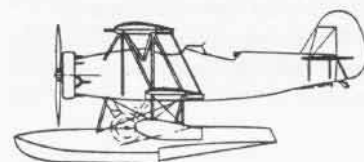
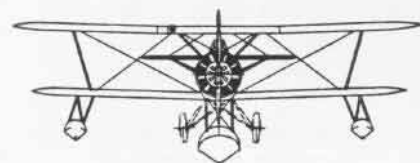
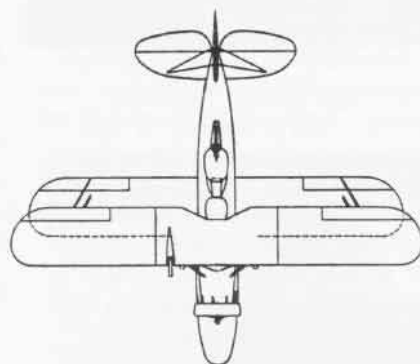
Span	33'8"
Length	
Landplane	25'8"
Seaplane	29'1"
Height	
Landplane	10'10"
Seaplane	12'7"
Engine	P&W R-985A Wasp, Jr. 400 hp
Maximum speed	
Landplane	149 mph
Seaplane	147 mph
Service ceiling	
Landplane	15,600'
Seaplane	13,500'
Range	
Landplane	643 miles
Seaplane	624 miles
Crew	two
Armament	one .30 machine gun, fixed, forward firing one .30 machine gun, free, rear cockpit



XOJ-1 Zap Flap



XOJ-1



people · planes · places

Awards

"He's not getting older — he's getting better!" is an expression that seems to fit ADJC Gordon R. "Pappy" Jenkins very well. He was named Aircrewman of the Quarter for North Island's HC-3 recently. In photo, squadron X.O., Cdr. Steve Miliken, presents Jenkins with his plaque.



During the Naval Test Pilot School's 30th annual reunion and symposium at Patuxent River, RAdm. James H. Foxgrover, Commander, NATC, presented awards to the Center's outstanding test pilot, test project NFO and test project engineer for 1977. Recognized for their outstanding ability, aptitude, motivation, flight and systems testing and leadership were LCdr. Joseph P. Sciabarra, test pilot; Lt. Franklin S. Achille, NFO; and Robert W. Webster, engineer.

VP-64, Willow Grove, and VP-92, South Weymouth, were recently awarded Meritorious Unit Commendations for their participation in ASW training operations while flying from NAS Bermuda, February 13 to May 22, 1977.

Rescues

An alert air traffic controller recently aided a troubled *Cessna* en route from Beeville to Brownsville. Shortly after takeoff, the pilot lost his navigational aids and radar contact with Houston Center. The center contacted Percy Watts, retired Navy man presently working at Kingsville's radar air traffic control center. Watts located the small plane and contacted its pilot through Corpus Christi International, which had been able to establish radio communication. The pilot was given a corrected course and proceeded on his journey with reassurance. Meanwhile, a Texas Airlines pilot monitoring the radio communications decided to warn Watts of overcast conditions which would prevent a safe descent at Brownsville. Another corrected course was given the pilot and Watts guided him to a local airport for a radar controlled approach and landing. Watts was quick to point out that he "just happened to be the controller that answered the call." He said that there are other shifts and other controllers who could have done the job just as well. "They're all professionals and any one of them could have handled it without a hitch."

VP-9's Adak Det, which provides SAR service for the Aleutians, recently performed its first medevac when a USAF officer at Shemya, 400 miles west of Adak, suffered an attack of acute appendicitis. VP-9's Crew One picked up the patient for transfer to Elmendorf AFB. The four-hour flight was uneventful until the patient's condition suddenly worsened on approach to Elmendorf. HM3 Bartruff tended the patient's shock symptoms while pilot Lt. Terry Johnson made a flawless approach and landing. The patient was transferred to a waiting ambulance and, after surgery, was well on the road to recovery.

AC2 Joe Ryle holds his two-year-old daughter Elizabeth while his wife, Cathy, holds newborn Jennifer Ann in the *Sabreliner* where she was delivered.



Cathy's doctor and VR-24 arranged a medevac from NAF Sigonella to Naples for the delivery, but Mother Nature wouldn't wait — the baby was born one minute after touchdown at Naples.

A P-3A from VP-93 located a Panamanian merchant ship which had been adrift in the Atlantic east of Bermuda for over two months, after being abandoned by its crew. The motor vessel *Moruka* presented a navigation hazard until discovered by plane commander Lt. Roger L. Gettig and his flight crew of naval air reservists on annual AcDuTra. The *Executioners* are stationed at NAF Detroit and commanded by Cdr. Richard B. Duxbury. The original rescue of the *Moruka's* eight-man crew was coordinated by VP-8's Crew Five months earlier after receiving a distress call that the ship's emergency power was gone and its engine room was flooded. Under the direction of mission commander Lt. Rich Claire and plane commander Lt. Frank Wnek, and in conjunction with Coast Guard efforts, the *Moruka's* crew abandoned ship to board the Belgian vessel *Mineral Hoboken*.

Honing the Edge

CVW-8, commanded by Cdr. Judson H. Springer and currently aboard *Nimitz*, participated in *Open Gate 78*, a six-day exercise which tested NATO capabilities during combined operations. Here, F-14s from VFs 41 and 84 escort a British *Vulcan*. Countries participating included Portugal, England, West Germany and the Netherlands.



Moffett Field's Reserve Patrol Wings 180 and 280 supported the Pacific VP fleet component of a major naval exercise, *RimPac 78*, by providing briefing and debriefing personnel for active and reserve VP squadrons flying round-the-clock ASW operations. The month-long exercise combined the sea and air arms of Australian, New Zealand, Canadian and U.S. navies to test all phases of naval operations.

LCol. Phil R. Kruse, C.O. of VMFA-212, climbs from the cockpit of an F-4J at Iwakuni. The

During the recent three-day air-to-air missile shoot held in conjunction with CVW-5 and VC-5 at Poro Point, R.P., the *Chargers* of VF-161 scored direct hits on three BQM-34 targets on consecutive days. The first day Ltjgs. Dan Scarborough and Tom O'Brien killed the drone with an AIM-7 *Sparrow*. Lts. Charlie Parker and Stu Burfening were the second aircrew to destroy the BQM with the first *Sparrow* they fired. On the final day Ltjg. Scarborough and Lt. Keith Crenshaw fired the squadron's first missile of the day, an AIM-9 *Sidewinder*, disintegrating the target. VF-161's success was attributed to the entire team of *Chargers* who repaired, maintained and prepared the F-4Js and weapons systems for the exercise. As one ordnanceman said, "Just give us the targets and we'll do it again and again and again and again."

The Marines of HMH-772, Willow Grove, flew their CH-53s at Santa Ana during their annual AcDuTra. Lifting and delivery of supplies to ground units is only one of the jobs the *Sea Stallions* perform, but it is one that takes numerous hours of practice. Because Marine reservists don't have the opportunity to practice, external cargo hauling was emphasized, including hand signals to direct the aircraft over the cargo.

In a team effort at Cherry Point, VMA(AW)-332 played host to VMF-451, Beaufort, during a week long joint operation, conducting coordinated air attacks on specific targets. In flights of four, two 332 *Intruders* and two 451 *Phantoms*, the A-6Es navigated to and from the targets and the F-4s first were fighter escorts and then bombed ground targets. Two missile batteries from the 3rd Light Antiaircraft Missile Battalion provided simulated surface-to-air missile fire and VMGR-252's KC-130s handled tactical air refueling. Below,



Lancers from Kaneohe Bay replaced the VMFA-235 *Death Angels* who recently departed the air station en route back to Hawaii.



1st Lt. Emmet A. O'Donnell, VMFA-451 RIO, is dwarfed by tail section of an F-4 as he conducts preflight inspection. SSgt. Steve Manuel took the photograph.

people · planes · places

Testing



AO2 Rich Hirschmann installs a standard AN/ALE-29 chaff and flare dispenser in a special mount built for the AH-1T *Cobra*. NATC Patuxent River is conducting tests with the dispenser. Supervising are project pilot LCdr. Dick Scott, right, and project engineer Mark Troutman.

It seems everything is becoming automated these days and a good example is the automated hydraulic test system (ATS) at NARF Cherry Point. ATS was developed by NARF to meet the need for an effective pump tester that would also cut noise levels and reduce deficiencies created by manually-operated testers. According to Mr. O. C. Davis, head of the planning and engineering section, ATS makes it possible for one man to do the work of five. "Under the old testing system, a man had to stay with the equipment all the time to monitor the gauges," explained Davis. "With ATS a man can operate two test stations, which test four pumps, by monitoring the computer's digital readout."

Commissionings

VAW-1285 was commissioned March 1, 1977, at North Island and immediately began transition from the E-1B to the E-2B. Crew members received classroom instruction in the new aircraft and recently made 1285's first full-crew flight. The crew included: LCdrs. Rich McIntyre, C.O., and Frank Davis; Lts. Chuck Bennett and Jack Brennan; and AT2 Gary Cline. Lt. Bennett and AT2 Cline are attached to VAW-88 which provided aircraft and personnel to assist in the transition.

Mine Countermeasures Unit Alpha was recently redesignated HM-14. Cdr. Robert E. Jones is the first C.O. of the RH-53D-equipped unit. The redesignation marks the establishment of the second of three planned airborne mine countermeasures squadrons. Currently on duty is HM-12, commissioned in 1971. The third squadron, HM-16, will be established later this year.



Mrs. William J. Moyer, Jr., wife of VR-57's C.O., christened the squadron's first C-9B, the *City of San Diego*, during ceremonies establishing the Navy's newest reserve fleet logistics support squadron, at North Island.

Retirement

The era of the enlisted electronic countermeasures operator (ECMO) flying in tactical jet aircraft in the Marine Corps came to an end when MGySgt. Jack M. Deaton, VMAQ-2, Cherry Point, retired after 27 years of service. Reflecting on the ECMO's responsibility for jamming enemy radar, Deaton said it is essential for the ECMO to be able to train his ears to



recognize the sounds emitted from enemy radar, whether coming from coastline, ship or aircraft.

Records

Capt. W. V. Patterson, C.O. of VQ-1, flew his 2,001st hour in the A-3 *Skywarrior*, completing over 6,000 hours of total pilot time.

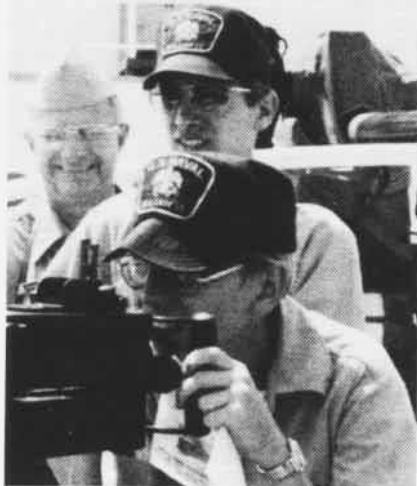
Cdr. Gary F. Wheatley, ComCar-AirWing-1, recently completed his 900th carrier arrested landing, marking his 300th trap aboard *Kennedy*. The air wing was embarked aboard the carrier, participating in *Solid Shield*.

Sea Cadets



NARDet and VP-68, Patuxent River, hosted six male and four female members of the Annapolis High School Naval Sea Cadet Corps recently. Ranging in age from 14 through 18 years, the cadets lived on board the air station for a weekend as part of their annual indoctrination training. In photo, sitting in a P-3's forward observer's seat, a cadet had a chance to listen in on the radio operator's headset.

Key West hosted a group of Navy League Sea Cadets from Coconut Grove, Fla., for four days of aviation familiarization training. Ages 11-17, the cadets toured VF-171, RVAH-3, USCGC *Diligence*, NAS operations, Naval Weather Service Environmental Det and AIMD. The air station C.O., Capt. James E. McCardell, held an inspection of the Sea Cadets as part of the training program.



Et cetera

Four VA-25 petty officers, ADC Jessie Wilson, AD1 Mark Boudah, AZ1 Lanny Wilke and AOC Vernon Werre, have been appointed naval officers under the limited duty officer program. Applicants for the LDO program must have one year in rate E-6 or above, be under 35 and pass the chiefs test. Warrant officer applicants must be E-7 or above. In the photo, from left, are X.O. Cdr. D. J. Wright; Ensigns Wilke, Boudah and Wilson; CWO2 Werre; and C.O. Cdr. Warner Butler.

A Royal Australian Air Force crew delivered the first of its P-3Cs to RAAF Edinburgh, South Australia. Part of a 10-aircraft order valued at over \$170 million, the sub hunter was flown from Moffett Field to RAAF's No. 10 Squadron. The RAAF will use the P-3C, together with its P-3Bs, for maritime surveillance over the Indian and Pacific Oceans rimming Australia's 10,000-mile coastline. Australia, the first international customer to acquire the C model, will receive the last of its order in January 1979.

Change of Command

ComFAirMed: RAdm. William M. Callaghan, Jr., relieved RAdm. William H. McLaughlin, Jr.

ComFitWing-1: Capt. Sam Flynn relieved Capt. John Disher.

ComLATWingPac: RAdm. Robert C. Mandeville, Jr., relieved RAdm. Robert P. McKenzie.

CVW-17: Cdr. Preston H. Lineberger relieved Cdr. Frederick J. Metz.

HS-5: Cdr. Russell J. Henry relieved Cdr. Roger P. Murray.

NARU Point Mugu: Capt. C. Hugh Childress relieved Capt. Roy T. Janiec.

NavAstroGru: Capt. James H. Simpson relieved Capt. Arthur R. Barke.

VA-303: Cdr. Tom Gehman relieved Cdr. Al Talley.

VF-31: Cdr. Dennis A. Sullivan relieved Cdr. James B. Best.

VF-121: Cdr. Francis X. Mezzadri relieved Cdr. Charles R. McGrail, Jr.

VP-90: Cdr. Kenneth T. Hall, Jr., relieved Cdr. Douglas L. Orme.

ComResTacSuppWing: Capt. Albert W. Howard, Jr., relieved Capt. Paul P. Schwarz.

VT-3: Cdr. Bruce A. Beebe relieved Cdr. Jack W. Hawthorne.



LEARN OR BURN



Story and Photos by
PH1 Tom Geren

The alarm sounds. Heads jerk around. A voice from the ship's intercom blares out one of the most feared sounds aboard an aircraft carrier: "Fire! Fire on the flight deck!"

The crew must know what to do, where to go and what equipment to use. All this and more is taught at the Fire Fighting School, Naval Air Station, Whidbey Island. The school's motto is "Learn or Burn."

Training starts early. Sleepy eyes and yawns accompany the 30 men to

their first class. To get their attention, the movie *Trial by Fire* is shown. The rest of the day consists of lectures and training aids designed to familiarize everyone with equipment, procedures and terminology.

The second day is actual hands-on fire fighting. Each student will feel the intense heat and smell the smoke of several large open-pit fires. The day begins with a briefing and then the class is divided into two teams and team leaders are selected. After a short bus ride, the teams don their fire gear and set about preparing and placing hoses for the day's activities.

The safety observer ensures everyone's goggles are in place before giving the thumbs up, commencing a spectacular magnesium demonstration. Two instructors, wearing silver suits, set off the blaze. As the students watch the bright flame through heavily tinted goggles, a water charge applicator tip is placed in contact with the magnesium, causing a tremendous explosion. Sparks and flames shoot high in the air as the silver-clad figures move in to extinguish the blaze.

Afterwards, teams gather and instructors review hose-handling tech-





niques and commands that must be followed and answer questions. Dry runs are made until each person knows exactly what must be done.

Next, the pit is filled with fuel oil and ignited. The heat is tremendous. Flames are high. Black smoke billows into the air. Sweat rolls from each brow. The water is turned on. The hose becomes a struggling monster. On command, both teams push forward, instructors at their side. A crash truck follows, just in case. In less than five minutes the fire is out. The complete drill is repeated three more times with student team leaders in command.

For the fifth time, the pit is ignited and the crash truck moves in. The students watch in amazement as the same type of blaze, which took them

five minutes to put out, is extinguished in 30 seconds by the truck.

After lunch, the group is introduced to the oxygen breathing apparatus. Now they are ready for the smoke maze trailer. As the door opens, non-toxic smoke billows out. Students enter and the door closes behind them. If they have adjusted their masks properly, their only problem is feeling their way around the maze. If they haven't, they will have to eat smoke all the way through the trailer.

The instruction ends when hoses are stowed and all gear put away. With this training and the introduction of crash trucks aboard carriers, the chances of devastating fires such as aboard *Forrestal* should be greatly lessened.



Islanders

Story and Photos by
PH2 Robin Tedder

A Federal Aviation Administration requirement recently posed a problem for the Mariana Islands Airport Authority. But sailors at Naval Air Station, Agana, Guam, came up with a solution.

The problem came about because the Northern Marianas government, now a United States commonwealth, is subject to FAA regulations. Since airports in these areas could not meet FAA requirements, the Navy entered the picture by offering the necessary aviation fire-fighting training. NAS Agana Fire Chief Robert A. Hughes offered his experience and specialized facilities at the air station to the airport authority for two weeks of training.

Learning to respect a fire reaching hundreds of feet in the air requires something more than old-fashioned fear. Hughes' task was ensuring that these men would enter this dangerous profession with more than fear on their side.

"The most important quality I try to instill in new fire fighters is not to be afraid of the fire," Hughes says. "Eventually, they become accustomed to it as their confidence grows."

To help build this confidence the students learn theory of fire extinguishing; the types of fire (liquid, electrical and ash-leaving products);



Learn

cause of fire; flash points (temperature at which various materials will burn); and methods for putting out fires.

After observing one pit fire, 100 feet of burning oil and aviation gas, the trainees were suited up to fight their first blaze. Standing ready with two fire trucks, experienced crash crew members manned four high-velocity water nozzles as the students entered the pit area. Water spray was employed first, taking several minutes to snuff the life from the liquid fuel fire. Though water is not normally used to fight a fire of this nature, it allowed more hands-on time in learning to control the spray nozzles and to practice technique. The students entered the pit again later with a stronger ally at their side, mechanical foam. In less than a minute, a black crater of oil looked more like a scene from a white Christmas as foam smothered crimson fire and dark smoke.

The students fought six of these big fires, demonstrated the use of modern fire-fighting equipment, rescued an unconscious passenger from a smoky airplane interior and learned the basic foundation of fire-fighting principles.

Students from the islands of Saipan, Tinian and Rota are being trained. After learning the need for additional fire engines on the latter two islands, the NAS crash crew rebuilt two trucks for their use. The Navy helped solve a problem for this emerging commonwealth.



Air attack on U-118 (1943)





A History of Sea-Air Aviation

Wings Over The Ocean **part thirteen**

By John M. Lindley

The U.S. Navy airship program, practically non-existent after the crash of USS *Macon* (ZRS-5) in 1935, was drastically changed by the outbreak of war in 1941. When the U.S. went to war, the Navy had 10 airships (non rigids), only six large enough to use at sea. Qualified airship personnel numbered about 100 pilots and as many aircrewmembers. The U-boat threat brought about a rapid expansion of the airship program. In June 1942 Congress authorized the Navy to build a fleet of up to 200 non-rigids. Not all were built, but the Navy had 168 blimps (mostly K-type) by 1945. Similarly, the number of airship personnel burgeoned so that by 1944 the Navy had 1,500 qualified pilots, 3,000 aircrewmembers and an adequate number of ground personnel.

At the peak of their operations, Navy airships patrolled about three million square miles of ocean in the Atlantic, Pacific and Mediterranean. The bulk of this escort and patrol work took place along the Atlantic Coast north of South America, and in the Caribbean and Gulf of Mexico where blimps could follow the slow merchant convoys with no difficulty due to their speed range from 0 to 70 miles per hour. Even though these blimps rarely attacked U-boats, they were a valuable part of the antisubmarine team because they could alert more powerful surface forces to the presence of a submarine. Their constant surveillance of merchant traffic also forced the U-boats out of the coastal traffic lanes into the broader

and deeper ocean areas where they would be less vulnerable to surface attackers, but also where there were fewer merchant ships. Only once was there a gunnery duel between a blimp and a U-boat. On July 18, 1943, K-74 spotted a U-boat on its radar and surprised the submarine on the surface. In the resulting action between bombs and machine guns, the U-boat brought down the blimp with its deck guns when the airship's bombs failed to release. Later, the U-boat was sunk by surface forces, and the crew members of K-74 were rescued the next day.

Because Navy blimps usually did not get into combat against U-boats, there is no available count of the number of submarines sunk by them. Usually a blimp would guide other surface escorts to the area where it had discovered a U-boat or force the predator to retreat to the relative safety of the high seas. Despite this, proponents of the lighter-than-air program proudly claimed that no vessel was sunk by an enemy submarine during WW II while under escort by an airship. In addition to these escort and antisubmarine patrols, Navy blimps also performed valuable search and rescue, mine-sweeping operations in the Mediterranean, and other utility duties such as photo reconnaissance.

While the patrol bomber and the blimp operated from the skies against the U-boat menace, a new type surface ship, the escort carrier (CVE), made its debut in the Atlantic. The British first tried to take aircraft to sea with merchant convoys by mounting a catapult on the bow of a merchant ship. These CAM (catapult armed merchant) ships had limited usefulness. The single *Sea Hurricane* fighter which could be launched was able to intercept German reconnaissance aircraft spotting convoys for U-boats, but once its mission was completed, its pilot had to land ashore or parachute into the sea. Introduced in May 1941, CAM fighters did manage to shoot down six German long-range aircraft by the end of the year.

The CAM ships were the first step toward the development of the escort carrier. The first of these new warships

was a converted German ship which joined the Royal Navy in June 1941 as HMS *Audacity*. *Audacity* had a merchant hull (5,600 tons; maximum speed, 15 knots) covered by a 475-foot-long flight deck. She carried six Grumman *Martlet* fighters (export models of Navy's F4F) on her flight deck since she had no hangar. By keeping two of these planes in the air over a convoy and two more at the ready on her flight deck should a U-boat appear in the area, *Audacity* proved her worth in convoy runs between Gibraltar and England during September and October. Even after U-75 torpedoed *Audacity* on December 21, 1941 (at the end of a four-day running battle with a Nazi wolf pack), the ship had shown that this was the way to get aircraft to sea for convoy operations because 30 merchant ships made the trip to England safely at the

cost of the carrier and one destroyer. The Germans lost five U-boats and two reconnaissance planes.

By March 1943 escort carriers built in the United States and Great Britain began to have an impact on the Battle of the Atlantic. With a maximum speed of 18 knots, these carriers took the offensive against U-boats which were beyond the range of shore-based patrol aircraft. Sometimes escort carriers accompanied a merchant convoy, in the manner of *Audacity*, between England and the Mediterranean. Other escort carriers made convoy runs to Russia helping to bring lend-lease supplies and equipment to the Soviets. On these northern convoy runs, CVEs engaged in frequent battles with U-boats and land-based German planes. The carrier's fighters often had to take off or land in poor weather conditions and heavy seas, but they

made sure that the supply line to the Soviets stayed open.

Since the British could not build enough escort carriers, and new CVEs under construction in shipyards in the United States (destined for loan to the Royal Navy) were not ready, the resourceful British converted 19 grain or tanker hulls, in their shipyards, to escort carriers, merchant aircraft carriers (MAC ships). Each of these carried four *Swordfish*. They, too, like the CAMs had limited operational capabilities.

The spring of 1943 brought U.S.-built escort carriers to the Atlantic antisubmarine patrols. As part of Adm. King's 10th Fleet, these vessels escorted convoys or formed hunter-killer (HUK) groups made up of 12 or more Grumman TBF *Avenger* torpedo bombers or as many as six Grumman FM *Wildcat* fighters in combination with six destroyers or destroyer escorts. Radar was an invaluable part of these HUK forces, both in the air and on the sea. By the end of the war, two CVEs, USS *Bogue* and USS *Card*, had used their aircraft so well that each had sunk eight U-boats. Between April 1943 and September 1944, the escort carriers sank 33 enemy submarines and shared credit for the destruction of 12 others in the Atlantic alone. Besides using their planes to sink submarines, the CVEs also guided surface warships to the U-boats. The only U.S. Navy escort carrier sunk by a U-boat was *Block Island*, torpedoed on May 29, 1944.

In addition to checking and then helping destroy the U-boat menace in the Mediterranean and the Atlantic, escort carriers also had an important role in Allied amphibious operations in Europe. Allied CVEs provided air cover for the landings in North Africa (November 8, 1942), Sicily (July 10, 1943) and on the Italian mainland at Salerno (September 3, 1943). At the same time available CVEs provided antisubmarine patrols in the vicinity of the amphibious fleet. Carrier and land-based aircraft protected the Allied fleet and reduced the effectiveness of the German aerial defenses, all of which helped the landings succeed. By

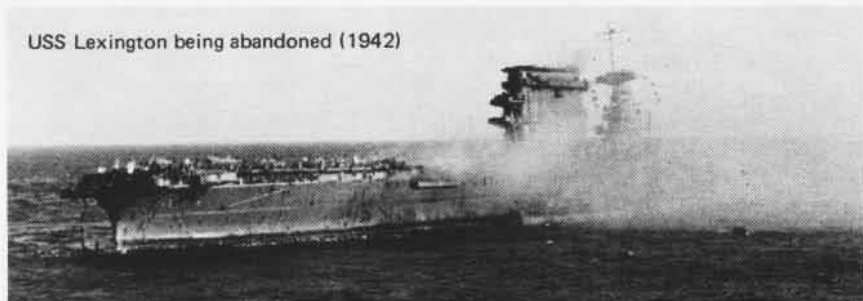
Japanese kamikaze pilots



Saratoga crew fights fires after attack.



USS Lexington being abandoned (1942)



D-Day at Normandy beach in France (June 6, 1944), the Allied sea lanes were nearly clear of enemy submarines due to the patrols of land and carrier-based aircraft. During the month of June 1944, the 58 U-boats ordered to break up the Allied invasion fleet sank only two British frigates, a corvette and an empty transport. German losses, in contrast, were heavy — 13 submarines to Allied air patrols over the English Channel.

The eventual success of surface escorts and land and carrier-based aircraft in the battle with the U-boat greatly facilitated Allied amphibious operations in the Mediterranean and at Normandy. In addition to the close air support of troops ashore, which carriers supplied in all the landings (except at Normandy where British land bases were close enough to the assault beaches), the carriers were instrumental in establishing the initial beachhead in each operation. In every case, amphibious attacks were the prelude to Axis defeat. Allied naval forces had established command of the sea for the Allies through conquest of the U-boats. Thus, once the Allies broke out of the beachhead at Normandy, the brunt of the war in Europe was carried by Allied strategic bombers and the growing land armies, as they pushed and fought toward Berlin.

In contrast to the European war, which involved the use of strategic bombing and large land armies to defeat the Nazis, the war in the Pacific demanded sea power strategy. After the war, the U.S. Strategic Bombing Survey explained that "Japan's geographical situation determined that the Pacific war would in large measure be a war for control of the sea, for control of the air over it. As a result, attacks against warships and merchant ships and amphibious operations for possession of island positions on which forward bases could be located were close to the heart of the struggle. Carrier task forces, surface ships to provide logistic support, and submarines, therefore, assumed roles of unusual importance."

A basic part of Allied control of the sea was the protection of merchant

shipping in the Pacific. Fortunately for the Allies, the Japanese submarines were not as much of a threat to merchant shipping after 1942 because of Japanese submarine employment policy. Despite some successes in the first year of the war, Japanese submarines were generally ordered to confine their offensive operations to attacks on enemy warships, not merchantmen. The Japanese also used many of their submarines for special missions, such as conveying supplies to bypassed island garrisons, further reducing their effectiveness as commerce raiders. Thus the initial advantage which the Japanese gained in the early months of the war soon frittered away as Allied commerce protection became more effective. By 1943, when a substantial number of escort carriers joined naval operations in the Pacific, the Japanese submarine menace was growing small-

er. And each new escort carrier added more aircraft to the fleet which could patrol, along with Navy flying boats, the wide expanses of the Pacific and protect Allied convoys.

The Navy's fleet submarines in the Pacific were the great commerce destroyers in the war with Japan. These submarines sank 54 percent (4,774,000 tons) of the Japanese merchant fleet. U.S. submarines also sank 540,000 tons of Japanese warships. Yet, what is equally impressive and too-little remembered is that aircraft belonging to the U.S. Pacific Fleet compiled a very creditable record of Japanese merchant and warship tonnage destroyed: 1,543,000 tons of merchant shipping and 745,000 tons of naval vessels. Since the Japanese failed to devise an effective defensive strategy for the protection of their merchantmen, they usually paid

K-type airship



British Sea Hurricane is hoisted aboard CAM ship.



USS Yorktown under attack at Midway (1942)



heavily when attacked by U.S. Navy airplanes or submarines. The overall effect of this gradual destruction of the Japanese merchant fleet by aircraft and submarines was to cut off the industrial centers of Japan from the resources and strategic materials of the lands they had conquered in East Asia.

By the spring of 1945 the air-sea blockade of Japan was very effective, strangling the Japanese economy. But blockade alone could not recapture lost territory, especially the many Pacific island bases or the Philippines which the Japanese had conquered in the first six months of the war. These Japanese strongholds and bases could only be retaken through amphibious operations, or what is generally called "island hopping." Successful invasion from the sea depended upon two conditions: the development of coordinated amphibious doctrine and tactics and local command of the air and sea. The U.S. Marine Corps in conjunction with the Navy amphibious forces provided the former; the Navy's fast carrier task forces supplied the latter.

Although many students of military history in the inter-war period interpreted the Anglo-French disaster at Gallipoli in WW I as proof that a successful seaborne invasion was nearly impossible in modern warfare, the U.S. Marine Corps disagreed. After the establishment of the Fleet Marine Force in 1933, the Marines set about developing an amphibious warfare doctrine which would guide them in the fulfillment of their mission of seizing advanced bases for naval operations. From these beginnings emerged the island-hopping tactics. According to British Major General J.F.C. Fuller, a distinguished military historian, the amphibious tactics which the Allies developed in WW II were "in all probability . . . the most far-reaching tactical innovation of the war."

An integral part of these Allied amphibious assault tactics was the full utilization of close air support over the beachhead and in securing the assault objectives. The techniques used in close air support had been worked out prior to WW II, but their first big test in combat did not come until the landings at Guadalcanal in August

1942. In the prewar debate over amphibious tactics, some Marine Corps and Army planners argued against the use of close air support (within 200 yards) of troops in the field because this tactic would probably not be effective, was too expensive and would probably be too dangerous because of the possibility of hitting friendly troops. Despite these objectives, the Marines found (in actual field operations during the inter-war years in Haiti, the Dominican Republic and Nicaragua) that close air support could be used if there was adequate and reliable ground-to-air radio communication for coordinating air strikes. By the time the U.S. was able to take the offensive at Guadalcanal, the Navy and Marines were willing to try close air support. The Army relied, instead, on "attack in depth," hitting enemy troops, supplies and lines of communication well behind the front lines.

In the amphibious operations of the Pacific War the Navy flew its fighters and dive bombers from its carriers for close air support missions. The Marines generally flew their aircraft from land bases, such as Henderson Field at Guadalcanal. Until the fall of 1944, Marine Aviators rarely flew close air support missions from carriers, but that arrangement was changed when the Navy desperately needed qualified pilots for both its fast carriers and escort carriers. At first Navy pilots flew F4F *Wildcats* and SBD *Dauntlesses* from fast carriers such as *Enterprise*, *Saratoga* and *Wasp* for close air support missions. When the escort carriers began to join the fleet in 1943 and 1944, they drew the assignment of flying close air support. Once the CVEs took up close air support, the fast carriers had more opportunity to take the offensive against enemy surface or air forces which were not necessarily in the immediate vicinity of the assault target. In October 1944 Marine Aviators began training to fly close support missions from escort carriers. Eventually they embarked on four (*Block Island*, *Gilbert Islands*, *Cape Gloucester* and *Vella Gulf*), for the landing operations in 1945, especially the expected assault on the Japanese home islands. Whether flown

by Navy or Marine Corps pilots, close air support of amphibious operations during WW II involved both defense against enemy aircraft or submarines in the vicinity of the assault beach and support of the troops ashore, with bombs, rockets or other weapons.

With the invasion of Tarawa in the Gilbert Islands on November 20, 1943, the Navy-Marine Corps amphibious team began to refine and develop close air support tactics. During this operation, eight escort carriers provided combat air patrols for the landing forces and bombing and strafing missions for troops ashore. They also flew antisubmarine patrols in the invasion area. These CVEs subsequently proved that they were as invaluable in the Pacific as they had been in the Atlantic. As mobile air bases, they could carry out antisubmarine searches, escort merchant convoys or service force ships, and ferry aircraft from bases in the rear to forward combat areas. Although the escort carriers were smaller and slower than the fast carriers of WW II and carried only 30 fighters and torpedo planes, they were very useful ships. Consequently by

TBF Avenger launches torpedo.



July 1942 the Navy had 99 CVEs in various stages of construction or conversion or on order (34 of these eventually went to the Royal Navy). Escort carriers were built either from the keel up or by conversion of merchant ships. The first conversion was accomplished in three months in 1941. Altogether 51 C-3-type merchant hulls were converted. This building program was so effective that in 1944-1945 4 to 7 CVEs normally operated in formations with 6 to 12 destroyers or destroyer escorts. In the landing at Leyte Gulf in October 1944, 18 escort carriers provided air support for the assault, with some 500 aircraft assisting in Gen. MacArthur's return to the Philippines.

Island hopping involved more than the ready availability of close air support and the courage and determination of the troops on the beaches. According to the U.S. Navy's *Fleet Tactical Publication No. 167* of 1941, two prerequisites for successful amphibious operations were secure lines of communication and command of the sea and air. The Allied Navies fighting in the Pacific were able to

secure these two prerequisites and, consequently, to ensure the eventual success of island hopping as a strategy because they perfected the fast carrier task force as the weapon for defeating the Japanese Navy.

When the Japanese attacked Pearl Harbor, they held all the offensive advantages. After an abortive attempt to prevent the Japanese occupation of Wake Island in late December 1941, the first U.S. Navy offensive actions were some hit-and-run carrier raids on the Marshall Islands (January 1942) and the Doolittle Raid on Tokyo in April 1942. In this raid *Hornet* ferried 16 Army B-25 bombers, under the command of Lieutenant Colonel James Doolittle, to a point some 650 miles from Tokyo where the bombers took off. None of the bombers were lost over Japan because the raid was a complete surprise, but not all the planes were able to find safety in China, an American ally. Of the 80 men aboard the bombers, 65 eventually got back to the United States, 9 were lost and 6 were captured and imprisoned for the rest of the war.

By mid-1942 both sides had suffered carrier losses. The Japanese lost their first carrier in the Battle of Coral Sea (May 7, 1942). At Coral Sea, the U.S. Navy lost *Lexington* but prevented the Japanese from invading Port Moresby on New Guinea, a key position in the Allied defense of Australia. This battle was important, not only because it protected Australia but because it was the first naval battle in which the participating warships never saw nor fired upon their opponents. The battle was fought entirely by the airplanes of the opposing fleets.

In the second great fleet battle, at Midway Island (June 4, 1942), both sides suffered additional carrier losses. Again the aircraft of the two opposing fleets provided the firepower. When, in the early stages of the battle, U.S. carrier-based Douglas TBD *Devastators* suffered very heavy losses (only 4 of 41 survived) to faster Japanese *Zeros* and concentrated anti-aircraft fire, the Japanese thought they would be victorious. But just at the moment when triumph seemed to be within the grasp of the Japanese, American SBD *Daunt-*

less dive bombers and *Wildcat* fighters caught the Japanese planes refueling and rearming on the decks of their carriers. The Japanese feverishly tried to get their aircraft off the decks and into the air, but U.S. pilots seized the advantage they had gained by surprise and pressed home the attack. When the battle was over, the Japanese had lost 4 fleet carriers, 322 planes and 100 first-line pilots. The U.S. subsequently lost the carrier *Yorktown* because of battle damage and a Japanese torpedo hit during post-battle efforts to save the carrier. The Battle of Midway proved that the carrier had become the major warship in the Pacific.

After Midway, the U.S. took the offensive in the Solomon Islands with assaults on Tulagi and Guadalcanal in August 1942. In this naval campaign each side committed four carriers to battle. The Japanese lost one light carrier and suffered damage to two other carriers. The U.S. Navy lost *Wasp* (September 15) and *Hornet* (October 26) to torpedo attacks. *Saratoga* and *Enterprise* both took heavy battle damage which forced them to the yards for repairs. When the Solomons campaign was over, the Japanese fleet had administered heavy losses to the Allies, but the U.S. had won the strategic advantage because the enemy was not able to reinforce Guadalcanal and thus had to abandon it in February 1943.

Following the Solomons, both sides withdrew their carrier fleets to repair and rebuild them. Thus between November 1942 and the assault on the Gilbert Islands in November 1943, there were no large fleet battles and no further carrier losses. During this year of rebuilding, U.S. Navy carriers did make some hit-and-run raids on Japanese positions, but the Marine and Army troops, under Gen. MacArthur, and the Navy's submarines, under Vice Admiral Charles A. Lockwood, did most of the fighting. By the time the U.S. Navy began its program of island hopping across the central Pacific in the fall of 1943, it had so many carriers and airplanes the Japanese were not able to regain the strategic offensive.

To be continued



Book Review

The History and Museums Division of the Marine Corps has just published a historical volume entitled *Marine Corps Aviation: The Early Years 1912-1940* by LCol. E. C. Johnson. It recounts the development of Marine Aviation from 1st Lt. Alfred A. Cunningham's solo flight in August 1912 to the eve of WW II. Based on extensive research in the Marine Corps Historical Center's Oral History Collection, as well as on documents and published items, the history is profusely illustrated with photographs of the aircraft and personalities of these colorful pioneer years of Marine Aviation.

The book includes notes, an index and appendices listing the Directors of Marine Aviation to 1940; the first 100 Marine Corps Aviators; all of the aircraft types used by the Marine Corps from 1913 to 1940, with their specifications; and a list of Marines who received the Medal of Honor, the Navy Cross, the Distinguished Service Medal, and the Distinguished Flying Cross for aviation duty between 1912 and 1940.

Copies may be secured from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, in a soft-bound edition for \$1.70 (Stock No. 008-055-00102-1).

Patches

I am a prospective Marine Aviator. I have been interested in military aviation and a military career ever since I was a Carson Long Military Institute cadet. In the meantime, I am building up a military collection in a couple of areas.

I would like to receive patches and pictures of aircraft from active USN/USMC squadrons.

George Chao
7 Pasture Lane
Poughkeepsie, N.Y. 12603

C-117s

In the July 1977 *Naval Aviation News*, Michael C. Miller wrote to correct an error in the C-117 story published in February about the phasing out of these aircraft. I give him credit for his knowledge of two which remain in the States — one at NATTC

Lakehurst and the other at NAS Memphis. Perhaps these two are the only known C-117s left in the continental United States but let me guarantee you there are, by far, still many more left in the Navy in active use.

I fly aircrew on C-117s at NAS Cubi Point. We are proud to say we own three of them: 039087, 012435 and 012438, and are expecting another one, NAF Kadena, Okinawa, owns one and is expecting another; Midway Island owns at least one and NAF Taipei, Taiwan, recently acquired one. We also have several Marine C-117s flying in and out of Cubi Point from Iwakuni, Japan. I admit these aircraft are old and have seen better days, but it will be many years until they are all phased out. They might be old but they get you where you want to go — safely.

William R. Porter, AMSAN
NAS Cubi Point, R.P.
FPO San Francisco 96654

Sea Story

In the March issue, you indicated your interest in anecdotes. Perhaps you'll like one of my favorites, sworn to be true by the Marine who told it to me.

In Korea, the F4U-5Ns went out nightly, generally harassing the enemy and occasionally shooting down a Bed Check Charlie. Navigation in those pre-Tacan days was sometimes a little casual, but there was an often-used system for getting home after a four-hour hop. One night the system went awry and the following ensued.

Very casually, "Hello, Red Base, this is Red Four, Gimme a practice DF steer, please, Over."

Very earnestly, "Red Four, this is Red Base. Due to personnel limitations in the tower, we no longer give practice DF steers. We only give emergency DF steers. Over."

Long pause, then, not so casual, "Red Base, this is Red Four. Ummmmmmmm, lemme try one of those!"

A. H. Vito, Jr., Capt., USN(Ret.)
9 Winchester Lane
Huntington, N.Y. 11743

SNC

I am researching the history of the Curtiss SNC advanced trainer, with emphasis

on its operational use. I am interested in hearing from anyone having information on or experience with the SNC. I will appreciate any assistance your readers can give me.

Paul J. Baechler
10709 Kay Berric Ct.
St. Louis, Mo. 63123

Anniversary Issue

Enjoyed your 60th anniversary issue.

Why not have a colored centerfold each month? One that would be suitable for framing.

John W. Dudek, (AQ1(AC) (Ret.)
970 Ivy Court
Lemoore, Calif. 93245

Ed's Note: Wish we could but color costs, and we have to ration our allowance.

May I add my congratulations to *Naval Aviation News* on its 60th birthday. However, my special thanks goes to all of those hard-working staffs who have labored over the years to produce the finest Naval Aviation magazine to be found.

In 1947 as a young boy of 12, I ran across my first issue of *Naval Aviation News* at NAS Denver. I guess I have to credit Art Schoeni with being responsible, at least partially, for my naval career. [Schoeni is a former *NANews* editor.] Reading of all the things that were happening in Naval Air and of the WW II exploits of the squadrons and carriers which were being covered in a historical series at the time, certainly helped sell me on the Navy. Thanks, Art, I have never regretted reading that first copy.

Believing in giving credit where credit is due, I would like to make a correction to Captain Lovell's letter in the December issue. The pilots involved in the "And Then There Were None" flight were not Naval Air Reservists. The flight was manned by Marine Reservists. I was involved in the recovery of two of the aircraft from this flight. Also, I believe the article appeared in *Approach*, not *Naval Aviation News*, but I could be wrong there.

Best wishes to you and your present staff and here's hoping for many more years of *Naval Aviation News*.

Robert L. Lawson
Editor, *The Hook*
5126 Central Avenue
Bonita, Calif. 92002

Fly-In

The 7th Annual National Stearman Fly-In will be held September 6-10 at the Municipal Airport, Galesburg, Ill. For more information contact Ted McCullough, 821 South Whitesboro Street, Galesburg, Ill. 61401 or telephone 309-342-2298.

Published monthly by the Chief of Naval Operations and Naval Air Systems Command in accordance with NavExor P-35. Offices are located in Bldg. 146, Washington Navy Yard, Washington, D. C. 20374. Phone 202-433-4407; Autovon 288-4407. Annual subscription: \$12.85, check or money order (\$3.25 additional for foreign mailing) direct to Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Single copy \$1.25.



Commissioned in April 1967, Carrier Airborne Early Warning Squadron 114 is tasked with providing AEW support to the fleet as part of CVW-15. Home-based at NAS Miramar and led by Cdr. A. W. Groman, Jr., the squadron recently completed transition from E-2Bs (photo) to the E-2C Hawkeye. The razorback depicted in the Hawgs' insignia represents an alert, aggressive creature that is quick to detect intruders and fierce in the defense of its comrades.





NAVAL AVIATION
NEWS